

“Nurse, I need help, too!”

Nursing Interventions to Support Partners of Patients
Suffering from Chronic Pain

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Academic Year: HS 2016
Submitted on: 03.05.2019
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**Bachelor Thesis
Nursing**

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Abstract

Background

Chronic pain not only affects the afflicted patient, but also their partners, who play a pivotal part in the management of chronic pain. Nurses play a key role in supporting the partner, whose needs often go forgotten.

Research Questions

How do partners of those patients suffering from chronic pain experience life at home and which interventions can nurses implement to support them?

Method

Two systematized literature searches were conducted in nurse relevant databases. The chosen studies were critically appraised and discussed with the Calgary Family Model.

Results

The following five themes were deduced from the partners' experiences: personal impact of chronic pain, change in personal and social relationships, support of patients, lack of personal support, and coping skills. The following interventions were established: showing belief in the partner, providing education, and offering support.

Conclusion

Nurses can help create individualized interventions to best support partners of those with chronic pain by conducting an early assessment of the couple according to the processes described in the Calgary Family Model.

Keywords

Chronic pain, partner, at home, nurs*, nursing intervention, experience, support, suffer

1. Introduction

Chronic pain (CP) is a ubiquitous phenomenon which affects an estimated 1.5 billion people worldwide (Goldberg & McGee, 2011). CP affects 20% of the adult population of Europe, which entails 95 million people (Eurostat Data Explore, 2016). Switzerland, with 1.3 million of its population (17% of total population) suffering from CP, is not exempt from the ramifications of CP on daily life (Breivik, Collett, Ventafridda, Cohen, & Gallacher, 2006). These numbers are expected to increase with an aging population (Reid, Eccleston, & Pillemer, 2015). CP is a pain that persists past normal healing time, and hence lacks the acute warning function of physiological nociception (WHO, 2018). These numbers are significant, as CP has been found to severely impact the quality of social and occupational life in those individuals whom it afflicts (Breivik et al., 2006). It is shown to cause feelings of hopelessness and helplessness, leading to depression (De Souza & Frank, 2010). Furthermore, those affected describe living with pain as a feeling of imprisonment (Schweizerisches Gesundheitsobservatorium, 2015). The effects of CP don't limit themselves merely to the afflicted person, but also taint close relationships; it is known to particularly damage family environments. It has been shown that CP negatively affects the partner's physical and mental health (Bigatti & Cronan, 2002). Lower marital satisfaction is shown to be related to greater pain perception (Roberto, Gold, & Yorgason, 2004). Partners of patients are not only affected by CP, but also play a pivotal role in both how their loved one manages their CP and in the duration of convalescence (Kindt et al., 2015). A lack of support from partners is known to adversely impact pain and function in those suffering from CP (Burns et al., 2016).

However, uncertainty persists as to how partners experience living with someone who has CP. Because of the crucial role which a partner can play in their sick loved one's life, this literature study will focus specifically on the partners. When considering all medical professionals involved with the treatment of CP, nurses are ideally positioned to advocate for their patients' needs because they have the most personal interaction with patients. Likewise, nurses are also well posed to unearth the possible feeling of being overwhelmed or to perceive a lack of knowledge felt by CP sufferers and their partners. Once needs have been established, nurses play a key role in the management of CP in the community. They can elect to support both patients and their partners through empirical nursing interventions, or to involve the help of further services in the community. A well-known aim of nurses is to empower their patients and in this case, additionally the partners, to take

advantage of pre-existing resources such as family, friends, or recreational opportunities offered by the community to help themselves most effectively (Piper, 2014). Unfortunately, there is a gap in research regarding specific nursing interventions, which support partners who care for patients with CP at home.

Therefore, the literature review, which will be used in this bachelor thesis, will be conducted to further understand the experiences of the partners of patients suffering from CP, and to explore which nursing interventions can be conducted to support these partners.

The authors were motivated by familial circumstances to explore the experiences of individuals living with a partner who suffers from CP. The sister of one of the authors experienced this phenomenon with her husband for seven years. The author was witness to how CP affected her sister's marriage, and how her sister's understanding of CP and compassion for her husband were beneficial in the management of his pain as well as helpful for their romantic relationship. Both authors have observed how patients who received support from their partners appeared to have more effective strategies for coping with their CP. The authors are keen to learn how scientific literature addresses CP in the context of partnership and which nursing interventions may be beneficial in the support of partners.

1.1. Study Aims and Question

The aims of this bachelor thesis are to determine how partners from patients suffering from CP experience everyday life, and to explore which interventions nurses can implement to support these partners. The end goal of this thesis is to increase nurses' awareness of partners' experiences with CP, and the nursing interventions which have helped couples. This thesis condenses a broad mass of information into a comparatively clear, concise, and easily accessible format to aid nurses in their support of couples who deal with CP.

As means by which the authors intend to achieve the above-mentioned aims, the following questions have been formulated.

Firstly, how do partners of those patients suffering from chronic pain experience life at home? Secondly, which interventions can nurses implement to support them?

1.2. Definitions and Theoretical Framework

This section will provide definitions of the central terms contained in the research questions and introduce the theoretical framework employed in this study.

1.2.1. Chronic Pain

The World Health Organization (2018) defines CP as pain that persists past normal healing time, and hence lacks the acute warning function of physiological nociception. Usually pain is regarded as chronic when it lasts or recurs for more than three to six months (Treede et al., 2015). The North American Nursing Diagnosis Association International (NANDA) describes pain as,

“whatever the experiencing person says it is, existing whenever the person says it does, an unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage; sudden or slow onset of any intensity from mild to severe, constant or recurring, without an anticipated or predictable end and a duration >6 months; a state in which an individual experiences pain that persists for a month beyond the usual course of an acute illness or a reasonable duration for an injury to heal, is associated with a chronic pathologic process, or recurs at intervals for months or years” (NANDA International, 2018).

1.2.2. Partner

The term partner in this study refers to any individual of any gender who shares domestic life with the individual suffering from CP (“Partner”, 2019). The term “partner” was selected because of its inclusive scope. Additionally, it is less limiting, because the term “spouse” requires a legal bond (“Spouse”, 2018).

1.2.3. Nurse

“A nurse is someone who has completed a program of basic, generalized nursing education and is authorized by the appropriate governing authority to practice nursing in their country” (International Council of Nurses, 2018). In the Swiss context, the word which pertains to the definition above is Pflegefachperson. This nurse can hold either a

national registration (RN / HF), a Bachelor of Science degree (BScN / FH), Master of Science degree (MScN / APN), a Doctor of Philosophy in Nursing (PhD) or a Doctor of Nursing Practice (DNP). The definition of a nurse which is used in this paper is to be distinguished from the Swiss term for a nurse's assistant, Fachperson Gesundheit (Schäfer, Scherrer, & Burla, 2013).

1.2.4. Nursing Intervention

A nursing intervention is defined as “any treatment, based upon clinical judgment and knowledge, that a nurse performs to enhance patient/client outcomes” (Butcher, Bulechek, Dochterman, & Wagner, 2018). Existing nursing interventions for CP include complementary and alternative therapies. Specifically acupressure, acupuncture, aromatherapy, guided imagery, music therapy, and relaxation breathing are well documented (Hamlin & Robertson, 2017).

1.2.5. Support

Support can be defined in multiple ways, but in this bachelor thesis, the verb “support” is defined as to assist and help (“Support”, 2018). A critical way in which nurses can “assist and help” their patients is through empowerment. Empowerment is a means of support in which the autonomy of the one being imparted power is promoted (Laschinger, Gilbert, Smith, & Leslie, 2010).

1.2.6. Calgary Family Model

The Calgary Family Model (CFM), which was developed as a structural aid for nurses to obtain specific understanding in the sensitive process of discovering and creating interventions to alleviate the personal burdens carried by patients and their partners, is comprised of the Calgary Family Assessment Model (CFAM) and the Calgary Family Intervention Model (CFIM). Throughout the entirety of the assessment and intervention process, nurses must treat their patients and their partners with respect and regard them as equals if they wish to bring about any positive change (Wright & Leahey, 2013, pp. 195, 311). Both models are integral to this thesis and will be explained below.

The CFAM provides a multifaceted framework with which nurses can assess families and organize their data to help families resolve issues. Such a multidimensional, integrated,

and systematic model is necessary due to the intrinsically complex nature of families. The CFAM provides nurses with a tool to synthesize their data in a way that highlights a family's strengths and weaknesses. There are three main categories which all contain further subcategories as shown in Illustration 1. The first category focuses on the model's structural aspect and centers on internal, external, and contextual factors of a family. Internal factors include the family composition, gender, sexual orientation etc. while external factors are listed as extended family or larger systems. Contextual aspects include ethnicity, race, social class, religion and environment. The model's second main category encompasses the developmental aspect of assessing families and is broken down into the following subcategories: stages, tasks, and attachments. The CFAM's third and most practical category deals with function aspects. The functional category differentiates between instrumental and expressive contents. The authors assign the activities of daily living to the instrumental section and assign various forms of communication, roles, influence, beliefs, and coalitions to the expressive section (Wright & Leahey, 2016)

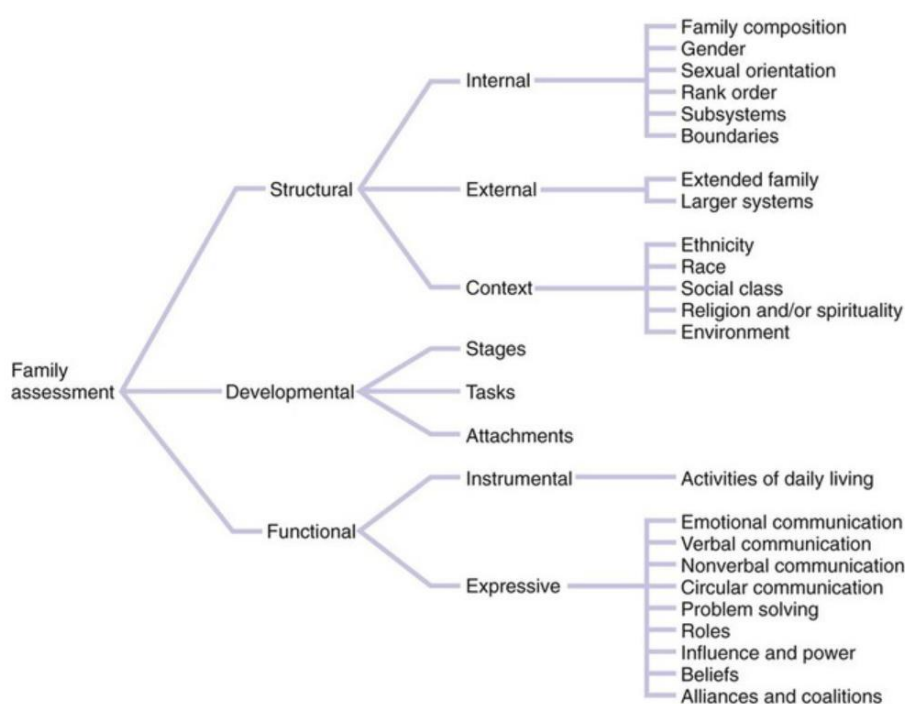


Illustration 1
CFAM Branches (Wright & Leahey, 2013, p. 52)

Once a systematic family assessment has taken place, the CFIM can be implemented to bring about useful change by means of a nursing intervention, which has been tailored to a specific family. Due to the unique nature of each couple, it is necessary that nurses

create individualized interventions together with the couple to best promote adherence (Wright & Leahey, 2013, p.152). Adherence, or the extent to which someone follows an agreed set of actions, assumes an equal relationship between two people and is a voluntary process (Chapman, 2018). The authors emphasize that the CFIM is not merely a list of nursing interventions, but a tool to personalize the way in which a nurse helps families to function better. As seen in Illustration 2, the nurse offers interventions which will intersect with the cognitive, affective, and behavioral domains of how the family functions to obtain the maximum level of effectiveness.

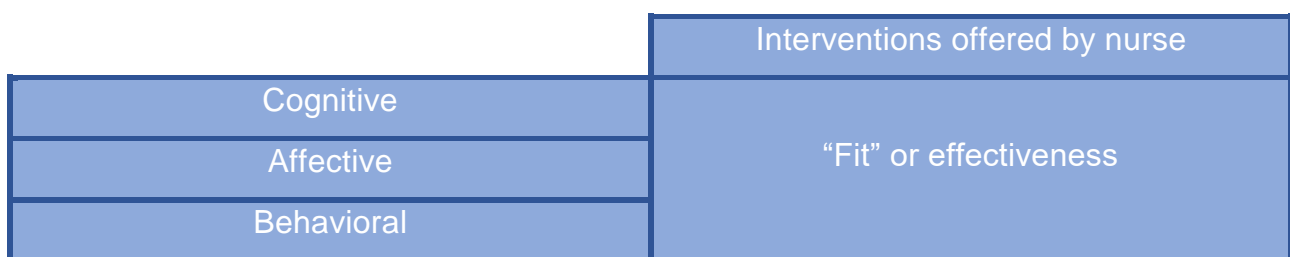


Illustration 2
CFIM Intersection of domains and interventions (Wright & Leahey, 2013)

Cognitive domains encompass offering new ideas and educating the family on health issues or risks. The affective component would include the reduction or increase in emotions that may be blocking a family's problem-solving effort, whereas the behavioral domain deals with helping families change their specific behavior. The interventions will then be analyzed and selected based on how effectively they meet the family's specific needs (Wright & Leahey, 2016). Due to the nature of the research questions, we will apply this model to patients and their partners.

2. Method

The following chapter explains the procedures used to answer the research questions. An overview of the process is displayed in Illustration 3.

2.1. Database Search Strategies

The study questions consist of two components: the first being how partners of patients experience CP and the second being which nursing interventions can be implemented to support these partners. Therefore, two systematized literature searches between September 2018 and January 2019 were conducted in the following nursing relevant databases: Cochrane Library, CINAHL and PubMed. In addition, the database PsycInfo

was used, as the research questions contain psychological aspects of the personal experience. The search was completed with the listed keywords in Table 1.

Table 1
Keywords

	Keywords	Synonym	MeSH-Terms
Phenomenon	chronic pain	incurable pain constant pain continuous pain	Chronic pain
Population	Partner	spouse significant other	spouses significant other
Setting	at home	daily life everyday life	
Other	Nurse	registered nurse	registered nurses
	Nursing intervention	Nursing procedure Nursing care	Nursing Interventions
	Experience	undergo	
	support	assist, encourage, aid	
	suffer	endure	suffering

Due to the nature of the study question, two search strategies were implemented. The keywords were combined with the Boolean operators “AND” and “OR”. Truncations (*) were used to include all variations of the word in the search.

The first part of the study questions explored the experiences of the partners living with patients who suffer from CP. This led to the application of the following search strategy found in Table 2.

Table 2
Search strategy one

	AND	AND	AND	AND
“chronic pain”	partner	support	“everyday life”	experience
OR	OR	OR	OR	
“continuous pain”	spouse	aid	home	

The second study question explored the nursing interventions that can support these partners. The listed search strategy in Table 3 was then conducted. Due to the nature of the second study question, it contains words which are dependent on the results of the first strategies (i.e. “lack of information”, “coping strategy*” etc.)

Table 3
Search strategy two

	AND	AND	AND	AND
“chronic pain”	partner	support	nurs*	(variables dependent on search strategy one)
OR	OR	OR	intervention	
“continuous pain”	spouse	aid		

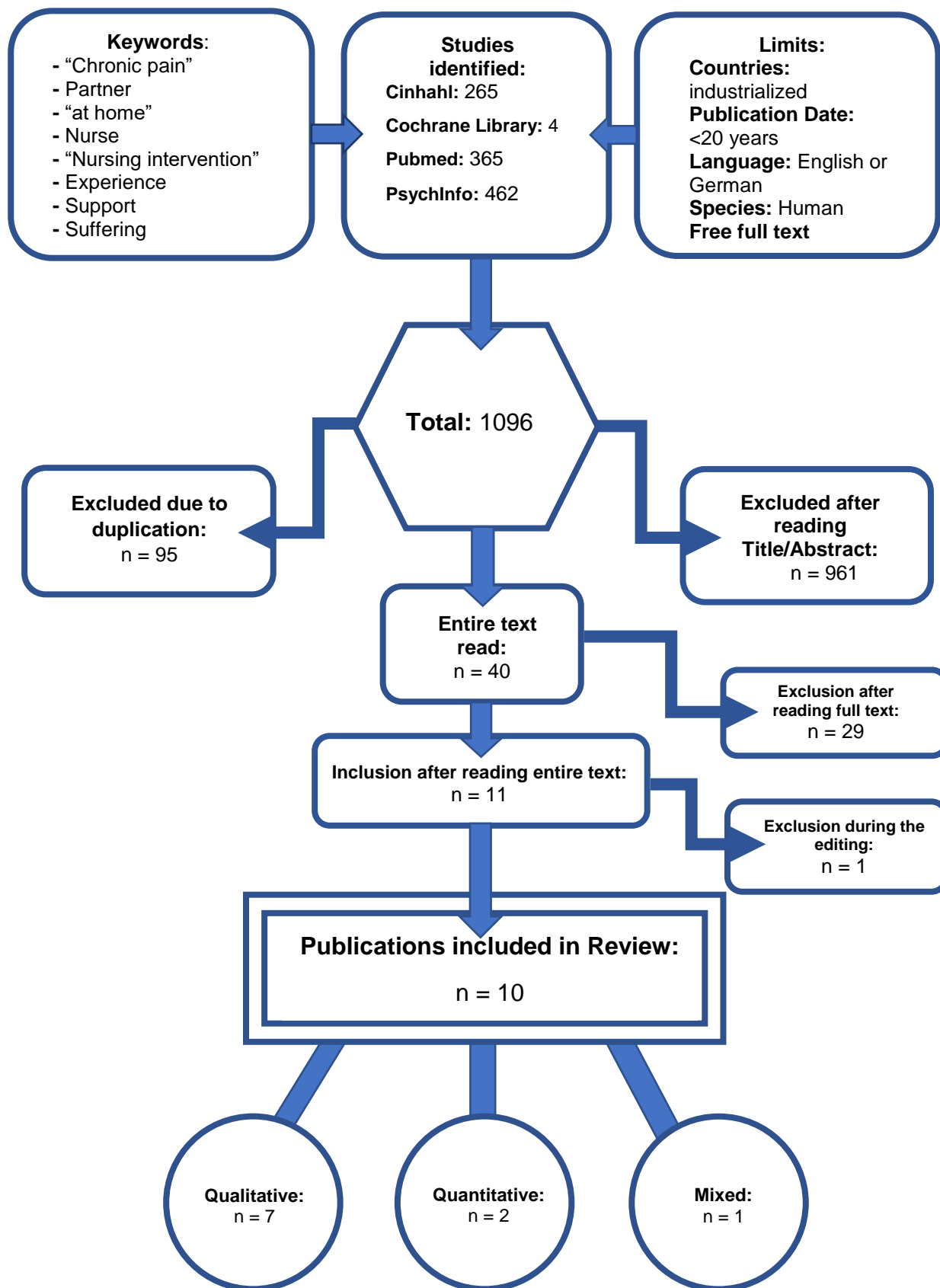


Illustration 3
Flowchart

2.2. Limitations

The following limits were used to narrow down the research results:

- Studies must have been implemented in industrialized countries (e.g., USA, Canada, European countries, Australia), as they have similar socio demographic backgrounds as Switzerland, which argues for transferability to the Swiss culture and health care system.
- Due to the authors' proficiency of English or German, the studies need to be in these languages.
- Studies need to have been conducted in the last 10 years, so that the most up-to-date research can be considered. This limit was extended to include studies from the last 20 years, as there were not enough current studies found during the systemized search. During the research, the authors noticed that the experience had not changed during the last 10 to 20 years.
- Studies need to involve only humans as we are interested in nursing interventions for humans.
- A free full text of the studies needs to be available for the authors to be able to access the studies.

2.3. Inclusion and Exclusion Criteria

The found studies with the subjectively most relevant titles were prioritized and then examined by reading the abstract. The studies that were selected for this bachelor thesis, was according to the criteria found in Table 4.

Table 4
Inclusion and Exclusion Criteria

Inclusion criteria	Exclusion criteria
The patients' diagnoses must include chronic pain	Diagnoses that do not include chronic pain
The partners must live in the same home as the patient suffering from chronic pain	Partners who do not live with the patients suffering from chronic pain
Patients and their partners need to be 18 or older	Patients and partners that are below the age of 18
Nursing interventions that support the patients	Medical interventions, which cannot be implemented by nurses

Due to the limited amount of words that could be used in this bachelor thesis, the focus was on patients diagnosed with CP, living with a partner and how nurses can support these partners. The specific physiological location of CP was irrelevant, as this paper focused on the consequences of CP and not primarily the diagnosis. The partners needed to live with the patients suffering from CP, as they are the most affected by the illness compared to other people who only meet the patients maybe once a day. Studies needed to involve patients and their partners who are above the age of 18, because the relationship between adults and children differ to the relationship between two adults. Nursing interventions had to be conducted in the studies as this is a nursing bachelor thesis.

The results of the literature search were documented as shown in Appendix A.

2.4. Evaluation of the Found Studies

The seven qualitative, two quantitative, and a single mixed method studies were summarized in a table format and evaluated with the help of the working tool for critical appraisal (AICA) by Ris and Preusse-Bleuler (2015) grounded on the works of Burns and Grove (2005), Lincoln and Guba (1985), LoBiondo-Wood and Haber (2005) .

The rigor of the qualitative studies was then evaluated based on confirmability, dependability, credibility, and transferability according to the concept of trustworthiness by

Lincoln and Guba (2011). The quantitative studies were critically assessed according to Bartholomeyczik (2008), which evaluated the reliability, validity, and objectivity of the studies. To determine the evidence level of the studies, the 6S-Pyramide from DiCenso, Bayley, and Haynes, 2009 was used. These results can be found in Appendix B.

3. Results

This chapter presents the results of the literature searches. These results which are shown in Table 5 are comprised of six qualitative, one quantitative, and one mixed-methods study relating to the experiences of partners of those with CP in combination with one quantitative and one qualitative study pertaining to nursing interventions for partners of CP. As mentioned above, the studies have been evaluated according to the 6S pyramid by DiCenso, Bayley, and Haynes (2009).

Table 5
Results of the literature search

Author	Aim	Design and Method	Evidence level (DiCenso, Bayley, & Haynes (2009))
Experience Studies			
West et al. (2012, Australia)	To explore the effect of chronic pain on the partner and immediate family of a patient with chronic pain	Interpretive qualitative design In-depth interviews and thematic analysis	1
Paulson et al. (2002, Sweden)	To illuminate the experience of female partners living with a partner who suffers from fibromyalgia	Qualitative, hermeneutic phenomenology Interviews with a narrative approach	1
Richardson et al. (2007, England)	To explore the experience of living with chronic widespread pain and the meaning of support in the context of their families.	Qualitative study with a narrative and an interpretative approach In-depth interviews	1
Söderberg et al. (2003, Sweden)	To describe the husbands' experiences of living with a woman with fibromyalgia	Qualitative study Interviews with a narrative approach	1
Matheson et al. (2010, England)	To explore the experience of partners of patients with rheumatoid arthritis	Exploratory qualitative study Semi-structured interviews	1
Jacobi et al. (2003, Netherlands)	To determine the objective burden variables of patients suffering from rheumatoid arthritis and their partners	Quantitative Longitudinal, cohort study Questionnaire survey	1
Fallatah & Edge (2014, Canada)	To explore how relatives of those with rheumatoid arthritis experience life as they care for their sick family member and to understand what kind of social support the relatives need	Descriptive qualitative design Semi-structured interview	1
West et al. (2012, Australia)	To measure and explore the nature of resilience in families, which include one-member suffering from chronic pain.	Explanatory sequential mixed method study Survey in quantitative phase Semi-structured in qualitative phase	1
Intervention Studies			
Sylvain & Talbot (2002, Canada)	To develop an agreed-upon nursing intervention model for women living with fibromyalgia, their spouses, and involved nurses	Qualitative inductive approach In-depth interviews and group meetings	1
Martire et al. (2003, USA)	To see if the couple-centered educational interventions (ASHC) offer more benefits than patient-centered interventions (ASHC-PS)	Quantitative pilot design Educational intervention	1

3.1. Studies of Partners' Experience

From the eight studies (Fallatah & Edge, 2015; Jacobi, 2003; Matheson, Harcourt, & Hewlett, 2010; Paulson, Norberg, & Söderberg, 2003; Richardson, Ong, & Sim, 2007; Söderberg, Strand, Haapala, & Lundman, 2003; West, Buettner, Stewart, Foster, & Usher, 2012; West, Usher, Foster, & Stewart, 2012), five main resulting themes have been created by means of a thematic analysis of the partners' experiences. The following partner-oriented, main themes found in Illustration 4 are as followed: personal impact of CP, change in personal and social relationships, support of patients, lack of personal support, and coping skills. They have been expanded upon in Table 6.

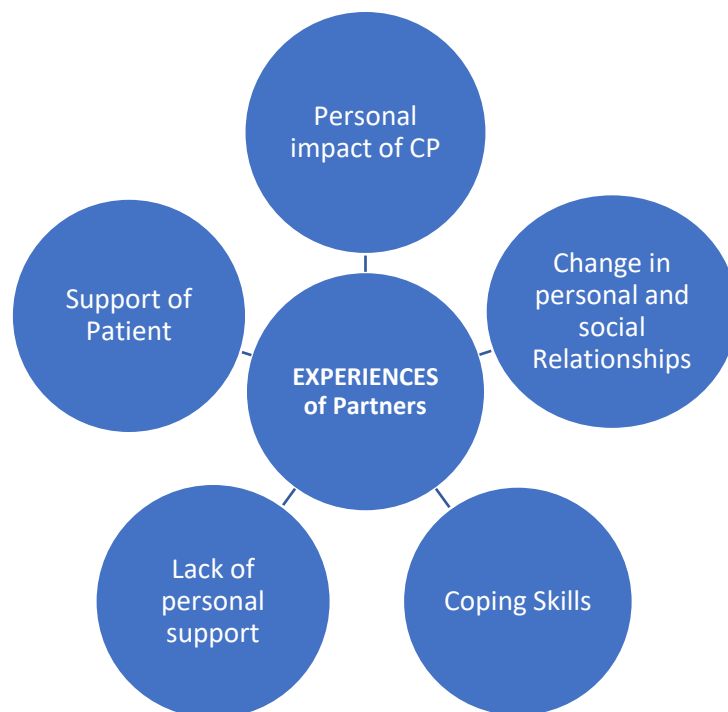


Illustration 4
Experiences of partners

Table 6
Study overview

The Experience of CP on the partner	
Personal Impact of CP on the partner	Psychological burden Financial burden Feelings of exhaustion Change in future plans Lifestyle changes Emotional impact of pain
Change in personal and social relationships	Positive and negative changes in the relationship between spouses Change in relationships with friends and relatives Change in relationships with the children
How the partner supports the patient	Emotional support Practical support
Lack of support for the partner	Lack of information about CP Lack of understanding Lack of emotional and instrumental support
Coping Skills	Adjusting lives Finding balance and coping

3.1.1. Personal Impact of CP

All eight experience studies contain content which describes the personal impact of CP on the partner. Ways in which partners are affected include: responsibility at home, hobbies, economic difficulties, hopes, fears, energy levels, and resilience (Fallatah & Edge, 2015; Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; West et al., 2012).

The first effect, “responsibility at home” was shown in the accumulation of domestic tasks which had previously been completed by the now-ill partner (Richardson et al., 2007; West et al., 2012). Especially husbands of women suffering from fibromyalgia (FM) reported an increase in their responsibility and work in the home (Söderberg et al., 2003). As the study “Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients” reported, home tasks contributed to an objective caregiver burden for 97.0% of the participants (Jacobi, 2003).

Another impact on partners was that they have less personal time than before their partner fell ill. Partners specified that their increased responsibility encroached on the time formerly devoted to their hobbies (Söderberg et al., 2003; West et al., 2012).

In addition to the obstruction of pastimes, husbands named increasing economic difficulties due to their partners' CP as having an impact on their personal lives (Söderberg et al., 2003).

Partners' hopes were described in their description of future plans, how they expected the outcomes of CP, and their perceived ability to survive the experience (West et al., 2012). Even despite having some hopes that their husbands would positively become more engaged in life, partners continued to fear a decline in the patients' psychological health. They expressed feeling disturbed by the chronically ill patients' reluctances to talk, and by the patients' lack of tolerance shown towards everyday disturbances including noise caused by the couples' children. Partners hovered between the hope that patients' attitudes towards CP would improve and the fear that patients would become increasingly impaired by CP. The feared impairments include possibility of dependence on drugs, being permanently wheelchair bound, and suicidal thoughts (Paulson et al., 2003).

Fears were shown as the partners expressed feeling worried, sad, helpless, and shocked as they experienced how CP affected their loved ones and how it changed their previous, shared lifestyle (Fallatah & Edge, 2015). The frustration and distress at watching their partner suffer was categorized as a "psychological burden". This was experienced as partners tried to protect their spouse from emotional and physical distress (Matheson et al., 2010). Fear, together with anger and self-blame contributed to the emotional impact of the supportive partner's burden (West et al., 2012).

Partners' showed decreased energy levels by stating that they feel exhausted, but have to endure (Paulson et al., 2003). Energy levels were also negatively affected by an interruption of sleep in 93% of one study's participants, which they credited to their partner's CP (West et al., 2012). In addition, an overall loss of physical strength was reported in partners (Jacobi, 2003).

The perceived impact of CP influenced how resilient a partnership was. Resilience, or the ability to overcome hardship (Hegney et al., 2007), was found to have an inverse relationship with perception of pain (Söderberg et al., 2003), but the relationship between resilience and mental health indicators was found to be linear (West et al., 2012).

3.1.2. Change in Personal and Social Relationships

The studies (Fallatah & Edge, 2015; Matheson et al., 2010; Söderberg et al., 2003; West et al., 2012) have shown that there is a variety of possible positive and negative changes in the personal and social relationships of the partners of patients with CP.

Fallatah and Edge (2015) have shown that relationships between spouses were improved due to the increased time spent together. But this could also be negatively impacted because of the patients' fatigue or the partners' long working hours (Matheson et al., 2010; West et al., 2012). Due to the illness, a heightened consideration towards the female spouse suffering from FM was required (Söderberg et al., 2003). Many partners discussed that a joint approach in dealing with the illness, helped manage the effects of rheumatoid arthritis (Matheson et al., 2010). The mixed method study from West et al. (2012) shows the importance of commitment from, and unity between the patients and their partners. A change in the partners' relationships with friends and relatives has been noted. Due to the lengthy duration of the illness, there tends to be a reduction in time and energy that is invested in other relationships, which leads to a loss of friendships and 'family connections' (Matheson et al., 2010; Söderberg et al., 2003; West et al., 2012).

A lack of understanding from friends who do not see the extent of FM has also led to a decrease in the social circle (Söderberg et al., 2003).

A further aspect stated by Söderberg et al. (2003) is that due to the increase in child raising by the partner, a deepening of the relationships between the children and the caregiving husbands has taken place.

3.1.3. Support of Patient

Many participants mentioned that they have to emotionally and practically support their sick partners (Fallatah & Edge, 2015; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003). Richardson et al. (2007) goes as far as saying that affirming support for the patient is paramount, whereas Fallatah and Edge (2015) mention that providing support can be viewed as an obligation or a responsibility.

Emotional support can take many forms, such as providing the patient company during doctor appointments and minor procedures or by motivating the ill husband (Fallatah & Edge, 2015). Richardson et al. (2007) explains that emotional support is shown through dealing with those with CP in a flexible manner. It endorses the seriousness of the suffering of the partner with CP. In another study the female participants with husbands

suffering from FM have said that they struggle to give support and comfort, as they feel obliged to show constant consideration. Even though a feeling of compassion is present, they simultaneously need distance (Paulson et al., 2003).

Practical support is shown in the husbands increase of helping in the household (Fallatah & Edge, 2015; Richardson et al., 2007) or being an advocate for the wife living with FM in different spheres of life. For example, a partner could defend a patient's disablement pension or reduce the time spent with work, as well as work from home.

To be able to better support their wives suffering from FM, the husbands have mentioned that they have learned the importance of reading body language (Söderberg et al., 2003). Richardson et al. (2007) explains that instead of the partner providing direct practical support, it is better to expect and avoid any possible difficulties, which leads to feelings of appreciation by the patient with CP.

3.1.4. Lack of Personal Support

Partners also require emotional and practical support (Fallatah & Edge, 2015; Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003; Söderberg et al., 2003). Emotional support could include receiving personal care and attention. Practical support includes helping to take care of the sick partner or provide financial aid (Fallatah & Edge, 2015). Studies show that there have been varied responses concerning the support that the partners have received (Jacobi, 2003; Paulson et al., 2003; Söderberg et al., 2003). Many partners felt that both a joint treatment approach with health professionals and the recognition of the partner's role is lacking but needed (Matheson et al., 2010). Husbands have mentioned a deficit in information and knowledge from health care personnel regarding FM. They desire more information, which they can use to better help and understand their wives (Söderberg et al., 2003). It must not be forgotten that information needs to be adapted according to the educational and cultural levels present in the population experiencing CP (Jacobi, 2003). This is confirmed by Paulson et al. (2003) who mention that health personnel need to care for their patients holistically.

Support from extended family members has been acknowledged as vital for both the partner and patient (Matheson et al., 2010). Although partners mentioned that they have received sympathy from family, friends, and acquaintances, they also have been regarded with suspicion (Paulson et al., 2003). A lack of general family support was positively correlated with financial problems and with a loss of physical strength (Jacobi, 2003).

3.1.5. Coping Skills

As mentioned above, partners expressed having had to make considerable adjustments to many aspects of their lives. To do this, they had to adopt various practical and psychological ways to cope (Fallatah & Edge, 2015; West et al., 2012).

Two ways in which they accomplished this were to accept the illness as a new aspect of their lives and yet provide themselves with adequate “me time” away from the patient. One participant mentioned such activities as studying, baking, exercising, and meeting friends as beneficial ways to achieve balance in her life (Fallatah & Edge, 2015). A positive outlook, patience or tolerance, and commitment and cohesion with a partner were regarded most highly by most of the participants to help combat stressful times (West et al., 2012).

3.2. Studies of Nursing Interventions

The outcome of the second literature search resulted in two studies involving nursing interventions for helping partners of patients with CP deal with this phenomenon.

The following interventions found in Illustration 5 have been expanded upon below: belief, education, and support (practical and emotional).

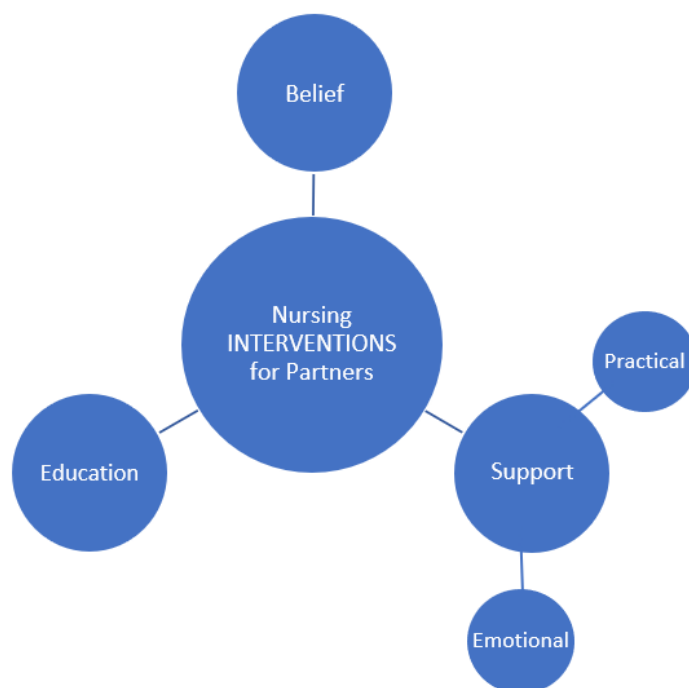


Illustration 5
Nursing Interventions

3.2.1. Intervention Study One: Sylvain and Talbot (2002)

The study “synergy towards health: a nursing intervention model for women living with FM, and their spouses” (Sylvain & Talbot, 2002) had a qualitative inductive approach based on the principles of the fourth generation evaluation to develop an unanimously agreed upon nursing intervention model for women living with FM, their spouses, and nurses working in a community health center in Québec, Canada.

Over a period of 14 months, individual, group, and validation interviews with women diagnosed with FM, their spouses and with community health care nurses were carried out to find out from the perspectives of women affected with FM, their spouses and nurses, what the meaning of a helpful intervention for women affected with FM and their spouses is.

The women mentioned that for them, a helpful intervention consists of believing, support, and follow-up care, which is often lacking. The spouses noted that there are two types of support, practical and psychological, in which they need better guidance as they often feel neglected. The nurses declared that a helpful intervention consists of the two major themes: support and education.

According to these results, a nursing intervention was derived. The nature of the intervention is believing, supporting (both in practical and psychological terms), and teaching. The intervention needs to be adapted according to the timing and the context. Around the time of the diagnosis, teaching and supporting should be begun to enable individuals affected with FM to access their resources more easily. The health and social services context are important, as there is a gap in the health system for these women and their spouses.

This model was shown to participants for affirmation and clarification repeatedly during the data collection and the data analysis. The main pattern that appeared is the ‘synergy towards health’, which implies the effect of personal development towards well-being, which includes the strengths which are derived from professional support, personal development and spousal support. The professional support causes and encourages personal development and spousal support.

3.2.2. Intervention Study Two: Martire et al (2003)

A quantitative pilot design was decided upon for the study, “Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their

spousal caregivers” (Martire et al., 2003). The quantitative approach sought to gain data on the particulars of those patients with osteoarthritis and their spousal caregivers. The study’s feasibility was determined by the control group comprised of just those with arthritis who attended the Arthritis Self-Help Course (ASHC) and the intervention group who attended the Arthritis Self-Help Course with Partner Support (ASHC-PS) group attendance rates. High attendance rates were observed in the ASHC-PS group, in which 89% of the patients and 83% of the husbands attended. Attendance in the ASHC group was significantly ($p<0.05$) lower. Those patients who attended less frequently, reported less self-efficacy regarding their arthritis ($p=0.01$) and trended toward more depressive symptomatology ($p=0.07$) before the patient course. Husbands of the patients who attended the meetings less reported more depressive symptomatology than the husbands of frequent attendees before the patient course ($p<0.05$).

The study’s acceptability was determined by changes in the patient’s daily activities and fatigue levels. One-half to two-thirds of the patients agreed that they had experienced improvements in their ability to manage daily activities and fatigue. They began to practice healthy behaviors as a result of the course. Ninety-two percent of the patients attending the ASHC-PS indicated that attending in the company of their husband was beneficial. Additionally, two-thirds of the husband agreed that they were able to better help their wives as a result of the course’s information.

Differences between the two groups include the patients in the ASHC reporting significantly higher levels of pain than patients in the ASHC-PS ($p=0.05$). Regarding patient outcomes, there was a greater self-efficacy in managing arthritis in the couple intervention ($p=0.1$) than the solely patient centered approach. Concerning the spousal outcome, there was little potential for change in this outcome because the levels of caregiving stress at the baseline were quite low.

4. Discussion

The following chapter critically discusses the results according to their rigor, and the theory to practice transfer is made in the context of the Calgary Family Model. The research questions are answered, and the limitations of this bachelor thesis are shown.

4.1. Critical appraisal

As described in the method, this chapter will critically appraise the primary studies found, which are assigned to the lowest level of the 6-S Pyramid by DiCenso et al. (2009). The qualitative data was critically assessed with the help of the trustworthiness instrument from Lincoln and Guba (1985) and the quantitative studies by Bartholomeyczik (2008). Some of the aforementioned aspects are discussed below to highlight several strengths and weaknesses of the studies used in this thesis. For a detailed critical appraisal of the studies, consult appendix B.

4.1.1. Critical Appraisal of the Qualitative Studies

The aim of Fallatah and Edge (2015) is to explore the experience of family members of those with RA, and the social support they require. This study exemplifies its transferability in the thorough description of the chosen background, sample selection, and method. Because this detailed study took place in a western country, Canada, it not only is suitable to be replicated, but can also be transferred to a Swiss setting and employed by the Swiss nursing profession. Confirmability was shown through the clarification of what motivated the authors to pursue this area of research. In this method chapter of Fallatah and Edge (2015), no information is provided as to why some participants were interviewed at home and others in a public setting. These different locations could have led to certain participants to feel less comfortable and minimize their struggles, which in turn could detract from the study's confirmability. Additionally, the lack of information regarding the study's funding negatively affects its credibility.

Matheson et al. (2010) set out to explore the experiences of partners of those with RA. This study shows credibility in that co-authors analyzed a sample portion of the interview transcripts with relatives of RA, written by the first author, independently of each other, and all authors deduced similar codes. This credibility is enhanced in that the consultant nurse associated with this project was present during the first interview in order to observe and give feedback on interview style, which was used to improve the quality of the remaining interviews. Confirmability is shown in the minimization of investigator bias that is seen in this study through the confirmation of the deduced codes with a participant who had not yet been interviewed. Dependability was not ensured in that there was neither discussion regarding whether any changes in the research design took place nor if the authors

considered any implications of possible changes. The transferability of the study is weakened due to only 25% of the sample being female. Had there been an equal amount of men and women interviewed, the data could have been more representative.

The aim of Paulson et al. (2003) is to illuminate the experience of female partners living with those with FM. The necessity of this aim is demonstrated by stating that no previous existing literature on the experience and meaning of being a female partner living with a man with FM existed. The study's credibility is shown through the copious rereading of the transcripts, through which the authors analyzed the data according to a phenomenological hermeneutic method. Data collection, transcription, and interpretation methods of data are described in detail and the pre-understood bias of authors is discussed. Since no data saturation is mentioned, the study's credibility is weakened. In addition, the lack of clarity regarding the time period during which the study was conducted detracts from the study's transferability.

The aim of Richardson et al. (2007) is to discover the experiences of families living with chronic widespread pain. This study emphasizes the inclusion of lengthy in-text-quotations regarding how the participants give and receive care and support in a family context. The authors provide copious amounts of evidence, in the form of in-text-quotations, to support their selected themes. This evidence aids the study's transferability. Credibility is shown in the way that the authors analyzed the interview results not just according to contents, but according to specific words. Additionally, the results are analyzed in the context of society. The study's lack of limitations detracts from its confirmability. The study's transferability is compromised in that the exact sample selection process isn't included.

The aim of Söderberg et al. (2003) is to describe the husbands' experiences of living with a woman with FM. This study's first three authors individually created themes by reading the interview transcripts multiple times. This precise description of the data analysis phase lends to the study's transferability. Once they compared and refined their themes, the last author compared those themes to the first three authors, which were almost fully in agreement. This adds to the study's credibility. The transferability of this study is detracted from in that no inclusion criteria regarding the sample are mentioned. Also, because no information regarding the authors' viewpoints is included, the study's confirmability is weakened.

The aim of West et al. (2012) is to explore the effect of CP on the partner and immediate family of a patient with CP. This study shows dependability in the study design selection which well suits the qualitative nature of the study question. Credibility is shown in the

mention of data saturation having occurred. Dependability is shown by the in-depth data collection, which includes a log of data collection as well as data analysis decisions. The study's credibility is lessened due to the lack of information on the source of the study's funding. Transferability is weakened because the study's setting is not mentioned further than that the study took place in Australia.

The aim of Sylvain and Talbot (2002) is to develop an agreed-upon nursing interventional model for women living with FM, their spouses, and the involved nurses. This study ensures credibility in that member checking occurred throughout the research process through group and validation interviews. Transferability is shown in the way in which the research results are highly organized and transparent. This study's credibility is not strengthened by the lack of where the research funding originated. Because the interview transcripts are only indirectly referenced in the data analysis chapter, it is unknown whether the interviews were transcribed loosely or verbatim. This casts doubt on the study's confirmability.

4.1.2. Critical Appraisal of the Quantitative Studies

The aim of Jacobi (2003) is to objectively determine how patients with RA and their partners are burdened by living within the context of RA. This study demonstrates reliability and validity in that the authors only included burden variables in their results if the burden was shown to be statistically significant ($P > 0.05$). The multivariate linear regression model used shows the study's validity. Also, the implemented questionnaires and answer possibilities are precisely formulated in a way that measures what the authors desire to know. Since 82% of the caregiving partners in this sample are male, the caregiver burden is likely misrepresented due to women often giving care even when both partners are healthy (Jacobi, 2003). Because no research question was posed, the study shows less reliability.

The aim of Martire et al. (2003) is to determine if couple-centered educational interventions offer more benefits than patient-centered educational interventions. This study shows validity in that the participants were randomly allocated to the intervention or control group, thus reducing sample bias. The method to evaluate the results of this study was defined before the intervention, thus exemplifying the study's objectivity. The standardized, literature supported scales also add to the study's objectivity. The study's small sample size shows normalization, which detracts from its validity.

4.1.3. Critical Appraisal of the Mixed-method Study

The aim of West et al. (2012) is to measure and explore the nature of resilience in families that include one-member suffering from CP. Reliability and validity in the quantitative portion of this study is shown by using five extensively peer-tested questionnaires. They also quantified their analytically derived qualitative themes to show the prevalence of the themes in the transcripts in order to prevent analytic bias. This contributes to the study's credibility. Due to the snowball sampling approach, as mentioned in the study's limitations section, the result's credibility is weakened. This may be due to the possibility that a greater number of intrinsically resilient families than less-resilient families chose to take part in the study. The quantitative sample size is too small for the data being collected, which weakens study's validity (West et al., 2012).

4.2. Praxis to Theory Transfer

This section will discuss the knowledge contained in the abovementioned results in the context of the CFM.

As described in the theoretical background, the CFM is divided into the CFAM and the CFIM. These two structural models are interconnected and should not be used independently of each other. Their multifaceted goals are as follows: the goal for patients is that they have an improved ability to manage their everyday lives and symptoms; the goal for partners is for them to reduce the risk of also falling ill; while the goal for couples is to facilitate the reduction of stress. These goals are created in an intentionally broad manner to encompass the individuality of partnerships (Wright & Leahey, 2013, p. 335). Such individuality is demonstrated in the results chapter of this thesis. These results will now be compared to the two components of the CFM to illuminate possible ways to transfer theory to practice.

4.2.1. Assessment

The nurse's assessment of the couple is vital to effectively provide the couple aid. Yet, not all assessments are equivalent to each other. To obtain the necessary detailed knowledge of the couples, a personalized and structured assessment must ensue that is precise and empathetic (Wright & Leahey, 2013, p. 143). A critical aspect to be discovered is the extent and quality of knowledge present in the couple. Patients might be cognizant of what they don't yet know, and they may have reservations about their ability to learn. Thus, the

nurse's assessment must gain a thorough picture of the situation at hand to work with patient and their partner well (Price, 2015; Wright & Leahey, 2013, p. 143).

4.2.1.1. CFAM Goals

The main goal of this structural assessment is to systematically understand how the couple thinks, feels, functions, and sees itself. When implemented, the CFAM shows nurses a self-created depiction of the partnership presented by the couple. With the help of the genogram and ecomap (Duhamel & Campagna, 2000), a better understanding of the problems that the couple face is attained. With this information the data can then be organized into the framework structure as described in the theoretical background (Wright & Leahey, 2013, pp. 52-75).

4.2.1.2. CFAM Goals Recognized in the Literature Review

There are parallels between the studies (Fallatah & Edge, 2015; Jacobi, 2003; Martire et al., 2003; Matheson et al., 2010; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; Sylvain & Talbot, 2002; West et al., 2012), which have been selected for this thesis and the CFAM. The results of the studies in this thesis will be compared with the branching framework of the CFAM, which includes a genogram and ecomap. An example of a combined genogram and ecomap can be seen in Illustration 6.

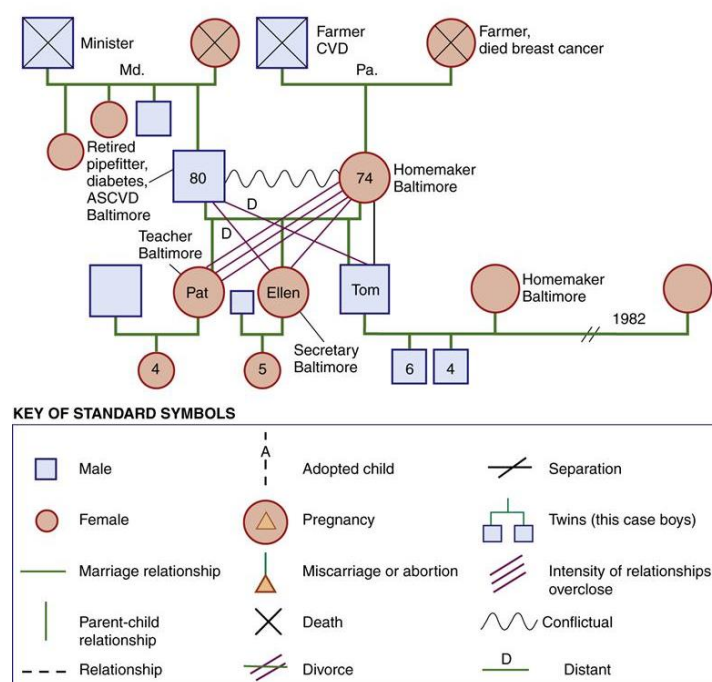


Illustration 6
Example of a combined genogram and ecomap (Themes, 2016)

The genogram and the ecomap are resources that can be used by nurses to synthesize their gained knowledge on the patient and their partners into structural and developmental categories of the CFAM framework. The structure of the couple's family is shown with the genogram, whereas the ecomap depicts the important or conflict laden social and personal connections between the couple and their environment. As the studies of this thesis have shown in the results' section, there have been changes in personal and social relationships of the couple as time progresses (Matheson et al., 2010; Söderberg et al., 2003). These changes are often so subtle, that they are imperceptible to the couple who experiences them. The genogram and ecomap help the patient, the partner and the nurses gain a clearer image into the couple's lives regarding who is and in which way they are involved.

Studies have revealed that partners feel that there has been a lack of support from family, social circles and health professionals (Jacobi, 2003; Paulson et al., 2003; Söderberg et al., 2003). The genogram and ecomap help nurses discern whether possible support for the patient and their partners is effectively lacking or simply concealed.

Partners have mentioned that CP has had a negative personal impact on their lives (Fallatah & Edge, 2015; Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; West et al., 2012). Due to this, they have expressed having had to make considerable adjustments to many aspects of their lives (Fallatah & Edge, 2015; West et al., 2012). Sometimes their resources are not perceptible to them and thus are not utilized. By sketching the genogram and the ecomap, the couple is encouraged to think further and to recognize their strengths and resources. As experience has shown, visualization of the involved parties leads to relevant details being revealed (Preusse-Bleuler, 2018).

The functional category is the essence of the CFAM, as it deals with activities of daily living and how the couples interact with each other. By using the CFAM, not only questions concerning the patient's limitations, for example mobilization, (as most other standardized questionnaires ask) but also from who and how he is supported, are questioned. Thus, the partner is automatically included. When patients are asked to name both their challenges and the positive ways in which they receive help from their partner, a shift from focusing solely on the bleak aspects of CP to possible benefits, occurs (Wright & Leahey, 2013, p. 138). As the results chapter has shown, the activities of the daily lives of patients and their partners are combined with many joys and burdens (Fallatah & Edge,

2015; Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; West et al., 2012). By posing questions relating to the experience the couples have had with CP, a better understanding is gained, and a repeat of the bad experience can be avoided. Being able to combine the knowledge and the opportunities of the couples with specialized nursing expertise, an individualized adapted care plan can be developed. Unnecessary relational complications can be avoided, and preventative action becomes possible (Wright & Leahey, 2013, p. 265).

For the CFAM to be effective, nurses need to show authentic appreciation and respect for the patients and their partners. This leads to trust and a professional relationship is developed. It encourages families to share and face their difficult circumstances. Nurses must remember that there are not any assessments that fully convey the absolute truth of a couple. Rather, assessments serve to portray both the couple's and the nurse's perspective at one specific point in time (Preusse-Bleuler, 2018).

With the help of the CFAM, the nurse is able to incorporate relevant information and is not stalled by unnecessary complexities. As nurses become more competent in family centered conversations, CFAM can be implemented within a single conversation, which averages between 10 and 15 minutes (Wright & Leahey, 2013, pp. 263-266).

4.2.1.3. CFAM Theory to Practice Transfer

During the course of the professional relationship, nurses are involved in various forms of conversations with patients who have CP and their partners. These conversations are spontaneous or planned, intra- or interdisciplinary. Regardless of what constitutes the conversation, they are important in building a relationship with the couple and often complement each other. The conversations need to be purposeful and time limited, because the relationship between nurses and couples are finite (Wright & Leahey, 2013, p. 266). Due to the complexity and expanse of the CFAM, the authors of this thesis will focus and expand solely upon the first therapeutic family assessment conversation, which is done within a 15-minute timeframe which is shown und expanded upon below in Table 7.

Table 7
15-minute CFAM Conversation Example (Müller-Staub et al., 2008)

7 Aspects	Description
Who	Nurses lead the conversation with the patients and their partners
What	Gain relevant information on: <ul style="list-style-type: none"> - ages, occupation, religion, and ethnic backgrounds - the couple's everyday experiences, expectations, and fears concerning CP, the couple's personal and social relationships by means of a therapeutic conversation
When	At the beginning of the therapeutic relationship
Where	In a quiet, private room in an in-patient or out-patient setting
How Often	Once
How	Through: <ul style="list-style-type: none"> - 15-minute exchange of dialogue between the nurse, the patient, and the partner - the development of a hand-sketched genogram and ecomap
In Which Way	The nurse offers the couple respect, appreciation, and specific praise concerning their strengths

At the beginning of a relationship (When) a nurse (Who), plans a set time to gain relevant information on the couple's everyday experiences, expectations, and fears concerning CP by means of a therapeutic conversation (What) with the patient (Who) and their partners (Who). The nurse also aims to discover the couple's personal and social relationships during this therapeutic conversation (What). The nurse conducts the conversation by showing respect and appreciation, as well as verbalizing specific praise about the strengths of the couples (In Which Way). The nurse draws up the genogram and the ecomap (How) to obtain essential information, which includes data regarding ages, occupation, religion, ethnic backgrounds and the relationship between the couple and their environment (What). When done thoroughly and efficiently, this only needs to be done once (How Often). Due to the intimate nature of these questions, it is essential that these interviews take place in a quiet, private room (Where). These interviews can either take place in an in-patient or out-patient setting depending on the individual situation (Where). As useful as experiences of other couples who have dealt with CP are, it is important for the nurse to remember that each family is unique. Therefore, this intervention needs to be

adapted to them, which entails that the nurse remains flexible and interprets the situation correctly. Short, 15-minute (How), therapeutic conversations as described above are neither intended to, nor able to resolve all the issues that may concern a family experiencing chronic illness. Rather their purpose is to highlight relevant areas where help is needed (Wright & Leahey, 2013, p. 266).

4.2.2. Interventions

“The aim of any nursing intervention is to effect change” (Wright & Leahey, 2013, p. 152). Nurses bring about the aforementioned change by performing interventions to enhance patients’ outcomes through treatment, which is based upon clinical judgment and knowledge (Butcher, Bulechek, Dochterman, & Wagner, 2018). Possible nurse interventions encompass various aspects contingent on empathy, competence, and the interpersonal exchange between nurses and couples they treat (Wright & Leahey, 2013, pp. 152-158).

4.2.2.1. CFIM Goals

Nursing interventions are most effective when they are offered in the context of a respect-filled patient-nurse relationship. By instructing, directing, or insisting on a form of change, which is contrary to the couple’s wishes, nurses will ineffectually use the time allocated to them to help couples (Wright & Leahey, 2013, p. 165).

With each couple and their family being unique and having a different composition of relationships and struggles, all interventions need to be personalized to them. Therefore, the CFIM is not a predetermined list of nursing interventions. Rather, it provides a means to develop a cohesion between the domains or areas of family malfunctioning and selected interventions offered by nursing.

Since strength and resilience are the core upon which the model is based, interventions should primarily deal with the cognitive aspect of daily life. “Interventions directed at the cognitive domain of family functioning usually offer new ideas, opinions, beliefs, information, or education on a particular health problem or risk” (Wright & Leahey, 2013, p. 149). With this newfound information regarding their health, the couples can figure out previously unexplored ways to solve what has been a burden to them. An example of this is the offering of information by nurses. Making educational information easily available to the couples is essential (Wright & Leahey, 2013, p. 160). This intervention reassures

“family members about certain aspects of the illness and reduces their level of stress” (Duhamel & Talbot, 2004, as cited in Wright & Leahey, 2013, p. 160).

4.2.2.2. CFIM Goals Recognized in the Literature Review

Sylvian and Talbot (2002) confirm the theory mentioned above in that the patients suffering from FM and their partners agreed that educating couples on the illness was an essential part in enduring the ensuing hardship. As mentioned in the results’ chapter of this thesis, Martire et al (2003) also demonstrated that couple-based education provides increased self-efficacy in the patient’s management of arthritis. “Interventions aimed at the affective domain of family functioning are designed to reduce or increase intense emotions that may be blocking families’ problem-solving efforts” (Wright & Leahey, 2013, p. 152).

This includes encouraging the patients and their families to share their experiences. By being aware of the results mentioned in the experience studies section of the results chapter, nurses can pose increasingly specific questions which may resonate deeply with the couples. Such resonance could produce a more open form of communication. For example, a nurse could state, “Many partners of patients who deal with CP have experienced the personal impact of having increased responsibility at home”. Then the nurse might pose the partner such a question: “Have you experienced this as well? If so, in which ways do you feel more responsible in your relationship?”. Nurses could also mention that because of increases in responsibility, it is natural for partners of those with CP to feel resentment towards their partner and consequently shame for their bitterness (Matheson et al., 2010). After showing the normalcy of such feelings, the partner may be more likely to answer a question such as, “Have you ever felt ashamed for feeling resentment towards your partner as a result of their illness?” in a more transparent way than if they were not told that others have felt this way, too. Through these therapeutic conversations, nurses can create a trusting environment for open expression of family members’ fears, anger, and sadness contained in their illness experience (Tapp, 2001; Wright & Bell, 2009, as cited in Wright & Leahey, 2013, p. 162).

Interventions aimed at the behavioral domain help family members to interact with and behave differently in relation to one another. As the results of the literature search have shown, the partners experience a change in relationships with the patients, family, and friends (Fallatah & Edge, 2015; Matheson et al., 2010; Söderberg et al., 2003; West et al., 2012) and that the partners are also in need of support from other family members

(Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003). By actively including family members, this could bring about relief for the partner and help them not have to carry the whole burden. By encouraging the partners to take a break and look after themselves, relief may be possible. As the results have shown, some partners have developed constructive coping strategies which include providing themselves with adequate “me time” (Fallatah & Edge, 2015; West et al., 2012). Such “time outs” or “times away” are essential for families facing excessive caregiving demands. By nurses supporting and encouraging partners to take such time out, they are providing the partners with a professional viewpoint that may already have been thought by the caregiving partner but had been suppressed due to feelings of guilt or shame. In such a case, the partner could now ideally feel validated and justified for taking a well-needed break because of hearing a professional opinion (Wright & Leahey, 2013, pp. 152-153).

4.2.2.3. CFIM Theory to Practice Transfer

There are two layers to the theoretical intervention: advice topics and advice techniques (Preusse-Bleuler, 2018).

With the help of an accurate assessment, it should be clear afterwards which advice topics concerning the management of symptoms and everyday life ought to be addressed. These advice topics could include medication management and possibilities for relief or guilty feelings. Together with the family, the topics should be arranged according to their jointly established priorities. It is essential that the advice techniques be couple-orientated and that the nurse does not take sides with either individual.

“One of the simplest but most powerful nursing interventions for families experiencing health problems is the use of interventive questions” (Wright & Leahey, 2013, p. 154). There are a variety of such questions from which nurses can choose and being able to decide when one question is more suitable than another is vital. The nurse should include not only the patient, but also the family, showing appreciation and respect, leading the conversation narratively, validating the emotions, and using circular systematic questions (Wright & Leahey, 2013, p. 157). This leads to the family feeling supported and strengthened in their everyday life and in their self-efficacy.

“Interventions can be as straightforward and simple or as innovative and dramatic as the nurse deems necessary for the health or illness problems presented” (Wright & Leahey, 2013, p. 173) by the couple. Due to the CFM’s expanse of possibilities and the relative

brevity of this thesis, only one nursing intervention example is described briefly and detailed below in Table 8. The provision of relevant information, which is desired by the patient and partner, is an intervention that is applicable to many couples with CP. Thus, it has been selected as the example.

Table 8
CFIM Example of sharing information (Müller-Staub et al., 2008)

7 Aspects	Description
Who	Nurses, patients, and partners
What	Nurses provide information on nursing, medical, and health issues
When	Throughout the entirety of the therapeutic relationship
Where	In a quiet, private room in in-patient or out-patient setting
How Often	Contingent on the depth of the couple's prior knowledge of CP
How	Use of "relevant, clear, specific" (Wright & Leahey, 2013, p. 157) language Provision of "easy to read" (Wright & Leahey, 2013, p. 157) literature
In which Way?	Empathetically and respectfully

As previously mentioned, a nurse (Who) must discover in which areas and to what extent partners (Who) of those with CP (Who) lack information. These couples (Who) often lack basic material on nursing, medical, and health issues (What). Once the nurse is aware of the gap in knowledge and once the couple expresses a desire to know more, it is imperative that the nurse provide the sought knowledge in an easily understandable manner. For example, in the form of comprehensible literature (How). This information needs to be relevant, clear, and specific. Because CP and relationships are so dynamic, new questions often arise. Thus, the nurse needs to provide suitable information throughout the entirety of the relationship (When and How often) with the couple who deals with CP in an empathetic and respectful (In which Way). Due to the intimate nature of these questions, it is essential that these interviews take place in a quiet, private room. Interviews can either take place in an in-patient or out-patient setting depending on the individual situation (Where).

4.2.3 Conclusion Phase

With a concise conclusion phase, the conversation increases in the quality of its results. This is optimized when the following steps are considered: anticipatory conversation time is reserved for this phase; discussed content is summarized; appreciation and respect is expressed; open questions, which still need to be processed, are recorded; the patient and the family are asked if they feel understood; the family is asked if they feel that the nurse has misunderstood anything; and orientation for the next steps is given (Preusse-Bleuler, 2018).

4.3. Limitations

This chapter outlines the ways in which this thesis is limited.

The studies reviewed in this research project were not undertaken in Switzerland.

However, they were published in the following western countries: Australia, Canada, England, the Netherlands, Sweden, and the United States of America, which have similar socio-demographic backgrounds as Switzerland.

CP includes a wide range of disorders, which means the experience of pain may differ between pain etiologies, conditions, and treatments. Due to this heterogeneity, the authors were not able to find enough studies that focused on any one form of CP. Thus, they have included studies with patients suffering from FM and arthritis, which are both illnesses whose main symptoms include CP, but do have various accompanying symptoms.

Even though many intervention studies for couples with CP were found in the literature searches, only two suitable studies (Martire et al., 2003; Sylvain & Talbot, 2002) describe interventions that were specifically created and carried out by nurses.

This bachelor thesis includes two systemized literature searches and is not a systematic review. Thus, the depth of research is not as thorough as it would have been had this thesis been a systematic review. In that case, every existing study pertaining to this thesis's topic would have been included.

Six studies (Jacobi, 2003; Martire et al., 2003; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; Sylvain & Talbot, 2002) have been published more than ten years before this thesis's submission. They have been found to be qualitatively sound and provide information which is still relevant today. The experience of partners of patients suffering from CP is a phenomenon that is not time-bound. However, with the advancement of the internet during the past 20 years, many opportunities, such as CP

blogs or CP advice websites, are available to technologically adept patients. One must consider that patients have different resources available to them which make using the internet either more or less accessible. Even those who can easily locate information about CP on the internet may have trouble differentiating between dependable and unreliable information. Thus, the role of nurses to provide patients with lacking information remains as it was 20 years ago. Due to this, the authors have decided to include these six studies.

The experience of partners of patients suffering from CP is highly individual and subjective. Even though main themes have been categorized, as written in the results section, one must take into consideration the reality that not all partners have the same experience. The nurse is responsible for considering these things when conducting the abovementioned interventions.

An additional limitation is the inexperience of this thesis's two authors in writing literature reviews. Important information and insight into this topic may be missing due to a general lack of nursing experience as well as unfamiliarity in the field of nursing research.

This thesis focuses solely on how nurses can best support partners of patients suffering from CP. Therefore, working together in an interdisciplinary team (which would include doctors, psychologists, physical therapists, occupational therapists, and social workers) is vital to comprehensively being able to support the patient and their partner. Further research needs to be undertaken to formulate an evidence-based strategy that includes an interdisciplinary intervention that best supports the couples.

4.4. Connection of Results to the Study's Aim and Posed Question

The central question of this thesis is twofold: how do partners of those patients suffering from CP experience life at home and which interventions can nurses implement to support them? Due to the subjective nature of such questions, it is impossible to come to a comprehensive conclusion. However, the results of the two literature searches conducted in this thesis have provided considerable insight into the lives of those who indirectly experience CP, and how nurses can help. Based on the aforementioned results chapter and discussion, this thesis's central question has been substantially answered.

5. Conclusion

CP not only affects the patients, but their partners as well. The experiences of partners of those suffering from CP documented in this bachelor thesis, show that partners' contributions need to not only be recognized by the nurse, but the partners must also be specifically and verbally acknowledged for the part they play in the management of CP. Due to the close and frequent contact nurses have with patients suffering from CP and their partners, they play a vital role in the support of the partners.

This bachelor thesis has shown that CP is a family affair (Fallatah & Edge, 2015; Richardson et al., 2007; West et al., 2012). This literature review showed that the experience of caregiving partners of those with CP can be divided into the following five main groups: personal impact of CP, change in personal and social relationships, supporting the patient, lack of personal support, and coping skills (Fallatah & Edge, 2015; Jacobi, 2003; Matheson et al., 2010; Paulson et al., 2003; Richardson et al., 2007; Söderberg et al., 2003; West et al., 2012). The two intervention studies found (Martire et al., 2003; Sylvain & Talbot, 2002) describe effective nursing measures that can be used to meet the needs of partners. These include supporting the partner in practical ways, which include the provision of educational material. Nurses can emotionally support partners by validating them and not trivializing their struggles.

The interventions serve as solutions, which must be adapted and applied individually to the couple and their situation. By incorporating the CFM, nurses have a tool that can be used effectively to include the partner in many aspects of nursing care that involve partners and families. With the help of the CFM, swiss nurses can increasingly assess and advise couples with CP on physical, emotional, and social matters, as nurses have already successfully done in 26 countries, including Germany, Finland, England, the United States of America, and Canada (Wright & Leahey, 2016).

Studies have shown that caregiving partners are at risk of becoming future patients if they are not supported themselves (Gonzalez, Polansky, Lippa, Walker, & Feng, 2011; Skuse, 2017). Therefore, the time invested in applying the CFM will be regained in the long term if the early assessment and the resulting interventions are implemented at the beginning of the relationship. This can avoid reentry into institutions or subsequent problems, such as partner burnout, couple separation, and depression (Leonard & Cano, 2006)

The CFM has been adapted to the Swiss context with the help of the BAIA Modell by Preusse-Bleuler (2018). As of 2018, only 19 pediatric, adult, and geriatric nursing institutions of various kinds, such as acute care hospitals, long-term care centers, and homecare in Switzerland implement the genogram and ecomap in their assessment of families (Preusse-Bleuler, 2018). Due to the vast advantages of the CFM for nurses, patients and partners, nurses in Switzerland should be more informed on its implementation and benefits. This impartment of knowledge should progressively ensue at the BScN and MScN educational levels in the form of modules and lectures across Switzerland. It should also be offered at the occupational level in the form of presentations and training days at hospitals, clinics, and home care team meetings. Information should likewise be thematized in journals and in political groups such as the Swiss Nurses Association (SBK), who can campaign for the public awareness of family centered nursing, and subsequently garner the necessary financial resources to support the abovementioned educational and occupational training. The results of increased CFM awareness and education are well worth the effort of familiarizing oneself with the model.

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List of Abbreviations

AICA	Working tool for critical appraisal (Arbeitsinstrument für ein Critical Appraisal)
APN	Advanced Practice Nurse
BScN	Bachelor of Science in Nursing
CP	Chronic Pain
CFM	Calgary Family Model
CFAM	Calgary Family Assessment Model
CFIM	Calgary Family Intervention Model
DNP	Doctor of Nursing Practice
FH	Bachelor of Science in nursing (Fachhochschule)
FM	Fibromyalgia
HF	National registered Nurse (Höhere Fachschule)
MScN	Master of Science on Nursing
NANDA	North American Nursing Diagnosis Association International
PhD	Doctor of Philosophy
RN	Registered Nurse
RA	Rheumatoid Arthritis
SBK	Swiss Nurses Association
WHO	World Health Organization

Word Count

Amount of word used in the abstract: 168

Amount of words used in the written work: 10525

The method in which the number of words were extracted in this bachelor thesis was carried out in accordance with the ZHAW guidelines. The word count excludes the abstract, tables/illustrations and their inscriptions, indexes, acknowledgements, declaration of independence and the two appendices.

Acknowledgements

We would first like to thank our thesis advisor Dr. Ute Grosse of the Institute of Nursing at the Zurich University of Applied Sciences. She faithfully answered our many emails in great detail whenever we ran into difficulties regarding our research or writing. She consistently allowed this paper to be our own work but directed us in the right direction whenever she deemed fit. We greatly appreciate all the help she provided us.

We would also like to thank Ms. Barbara Preusse-Beuler, also of the Institute of Nursing at the Zurich University of Applied Sciences, who aided us in the expansion of our knowledge of the Calgary Family Model. Without her participation and input, we could not have written such a thesis as we have.

Finally, we would like to warmly thank our families and boyfriends for lending us emotional and creative support during this process.

Declaration of Originality

We hereby declare that we have written the present work independently, without the help of third parties and citated the sources used.

Winterthur, May 2019

A handwritten signature in black ink, appearing to read "Sharon Kern". The script is cursive and fluid.

Sharon Kern

A handwritten signature in black ink, appearing to read "Joy Meng". The script is cursive and fluid, with a large, sweeping flourish at the end.

Joy Meng

Appendix

Appendix A: Database Search Strategies

Table 9 Search Strategy in the Databases

Date	Database	Search	Limits	Total hits	Relevant studies
16.10. 2018	CINHAHL	"chronic pain" AND partner AND "at home AND experience		1	
		"chronic pain" AND partner AND "at home" AND support		2	
		"chronic pain" AND partner AND experience AND support		17	West, Caryn; Usher, Kim; Foster, Kim; Stewart, L <i>Chronic pain and the family: the experience of the partners of people living with chronic pain.</i> Martire LM; Keefe FJ; Schulz R; Ready R; Beach SR; Rudy TE; Starz TW <i>Older spouses' perceptions of partners' chronic arthritis pain: implications for spousal responses, support provision, and caregiving experiences.</i> Paulson M; Norberg A; Söderberg S <i>Living in the shadow of fibromyalgia: the meaning of female partners' experiences.</i> Intervention: Miller, Lisa Renee; Cano, Annmarie; Wurm, Lee H <i>A motivational therapeutic assessment improves pain, mood, and relationship satisfaction in couples with chronic pain.</i>
		pain AND partner AND experience AND support		99	Intervention: Monin, Joan K.; Xu, Annie; Mitchell, Hannah-Rose; Buurman, Frank; Riffin, Catherine <i>Recalling support provision decreases distress and anger in response to partner suffering.</i>
		"chronic pain" AND spouse AND experience AND support		13	Richardson JC; Ong BN; Sim J <i>Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support.</i>
	Cochrane	"chronic pain" AND partner AND experience AND support		1	
		"chronic pain" AND spouse AND experience AND support		1	

		pain AND partner AND experience AND support		2	
	PsychInfo	"chronic pain" and partner and experience and support		743	
		"chronic pain" and partner and experience and support	Full text, 2008-2018, English language, human	229	Berry, Emma; Davies, Mark; Dempster, Martin. <i>Exploring the effectiveness of couples' interventions for adults living with a chronic physical illness: A systematic review</i> Sarah Wernicke, Jessie de Witt Huberts, Pia-Maria Wippert, <i>The pain of being misunderstood: Invalidation of pain complaints in chronic low back pain patients</i> Kindt, Sara; Vansteenkiste, Maarten; Loeys, Tom; Cano, Annmarie; Lauwerier, Emelien; Verhofstadt, Lesley L; Goubert, Liesbet <i>When is helping your partner with chronic pain a burden? The relation between helping motivation and personal and relational functioning.</i>
06.11. 2018	PsychInfo	"chronic pain" and spouse and experience and support		619	
		pain and partner and experience and support		2596	
		pain and partner and experience and support	Full text, 2008-2018, English language, human	694	
		"chronic pain" and partner and experience and patient	Full text	222	Arianne N. Baanders; Monique J. W. M. Heijmans <i>The Impact of Chronic Diseases-The Partner's Perspective</i>
	Pubmed	((("chronic pain") AND partner) AND experience) AND support		19	Eriksson M ¹ , Svedlund M. <i>'The intruder': spouses' narratives about life with a chronically ill partner.</i> Matheson L ¹ , Harcourt D, Hewlett S. <i>'Your whole life, your whole world, it changes': partners' experiences of living with rheumatoid arthritis</i>
14.11. 2018	PsychInfo	"chronic pain" and family and experience		1	
	Pubmed	((family) AND "chronic pain") AND experience		282	For intervention: Edlund SM ¹ , Carlsson ML ¹ , Linton SJ ¹ , Fruzzetti AE ² , Tillfors M ¹ . <i>I see you're in pain - The effects of partner validation on emotions in people with chronic pain</i>

				Lewandowski W ¹ , Morris R, Draucker CB, Risko J. Chronic pain and the family: theory-driven treatment approaches.
	Cinhahl	"chronic pain" AND family AND experience	225	
		"chronic pain" AND family AND experience AND support	59	<i>Ballús-Creus, Carles;Rangel, M Virginia; Peñarroya, Alba; Pérez, Jordi; Leff, Julian</i> Expressed emotion among relatives of chronic pain patients, the interaction between relatives' behaviors and patients' pain experience.
		pain AND family AND experience AND support	588	
28.11. 2018	AMED	"chronic pain" and spouse	17	<i>Schwartz L, Slater MA</i> The impact of chronic pain on the spouse: research and clinical implications.
27.12. 2018	Pubmed	((("chronic pain") AND intervention) AND nurs*) AND spouse	12	<i>Sylvain H¹, Talbot LR.</i> Synergy towards health: a nursing intervention model for women living with fibromyalgia, and their spouses.
		((("chronic pain") AND intervention) AND nurs*) AND partner	13	
		(((((("chronic pain") AND intervention) AND nurs*) AND spouse)) AND support	7	
		((("chronic pain") AND nurs* intervention) AND spouse) AND "family loss"	1	
		(((((("chronic pain") AND nurs* intervention) AND spouse)) AND future	1	
		(((((("chronic pain") AND nurs* intervention) AND spouse)) AND "financial loss"	0	
	CINAHL	((("chronic pain") AND intervention) AND nurs*) AND spouse	1	
		"chronic pain" AND nurs* intervention AND partner	2	

		"chronic pain" AND nurs* intervention AND family	20	<p><i>West, Caryn; Buettner, Petra; Stewart, Lee; Foster, Kim; Usher, Kim</i> Resilience in families with a member with chronic pain: a mixed methods study.</p> <p><i>Capitolo LB</i> Spouse-assisted training in pain coping skills and the outcome of multidisciplinary pain management for chronic low back pain treatment: A 1-year randomized controlled trial</p> <p><i>Leonard, Michelle T; Cano, Annmarie</i> Pain affects spouses too: personal experience with pain and catastrophizing as correlates of spouse distress.</p> <p><i>Lisa Renee Miller, Annmarie Cano, and Lee H. Wurm</i> A Motivational Therapeutic Assessment Improves Pain, Mood, and Relationship Satisfaction in Couples With Chronic Pain</p>
28.12. 2018	AMED	"chronic pain" and nurse intervention and partner and support	0	
		"chronic pain" and spouse and nurs* and intervention	0	
		"chronic pain" and nurse	7	
	CINAHL	nurs* intervention AND partner AND "pain" AND support	7	
12.01. 2019	PubMed	cognitive behavioral therapy AND chronic pain AND Partner	8	<p><i>S. Ramke, L. Sharpe, T. Newton-John</i> 2016 Adjunctive cognitive behavioural treatment for chronic pain couples improves marital satisfaction but not pain management outcomes</p> <p><i>Amy M. Williams & Annmarie Cano</i> 2014 Spousal Mindfulness and Social Support in Couples with Chronic Pain</p>
	Cinahl	dyadic AND "chronic pain"	25	
16.01. 2019	Cinahl	education AND "chronic pain" AND partner	21	
		communication skills AND "chronic pain" AND spouse	1	
	Pubmed	("chronic pain") AND partner) AND education	25	
		("chronic pain") AND spouse) AND education	19	
		("pain") AND spouse) AND education	144	

Table as a working instrument for a Critical Appraisal (AICA)

Reference: West, C., Usher, K., Foster, K., & Stewart, L. (2012). Chronic pain and the family: the experience of the partners of people living with chronic pain. Journal of Clinical Nursing, 21(23–24), 3352–3360

Appendix B: Included Studies

Summary of the Study:

Chronic pain and the family: the experience of the partners of people living with chronic pain

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> 3.2 million Australians suffer from chronic or persistent pain Similar numbers in other countries (12-30% in Europe) Back pain and arthritis form largest group Costs associated with CP in 2007 AUD\$ 34.3 million CP has big impact on the individual suffering from it and their families and partners This study resulted from a larger mixed methods study that investigated the link between CP and family resilience <p>Theoretical Background:</p> <p>Families and Chronic illness</p> <p>Nine studies show that chronic illnesses have an impact on families and partners</p> <p>Families have reported feeling</p> <ul style="list-style-type: none"> Powerless, alienated, emotionally distressed and isolated Guilty feelings (patient and families) Financial loss <p>Families/partners and Chronic Pain</p> <p>In reference to 3 studies, impact of CP on the patient:</p> <ul style="list-style-type: none"> Adverse effects on employment, daily living activities and in all dimensions of general health (including emotional distress) <p>This has an impact on families and partners according to nine studies:</p> <p>Significance of study:</p> <p>There are no previous studies that investigate the experience of chronic pain for partners.</p> <p>Purpose of study:</p> <p>To explore the effect of chronic pain on the partner and immediate family of a patient with chronic pain</p>	<p>Design: An interpretive qualitative design</p> <p>Setting: Australia-no more details</p> <p>Sample: 36 Participants initially took part in a larger mixed methods study, which measured and explored the impact of CP on family resilience</p> <ul style="list-style-type: none"> 9 Participants chosen to take part in this study (purposive sampling) partners of patients suffering from CP between four and 30 years Ages: ranged from 29–60 years, four out of nine were men <p>Inclusion criteria:</p> <ul style="list-style-type: none"> a partner of a person diagnosed with chronic pain for at least 12 months over the age of 18 years able to speak English. <p>Data collection</p> <p>First phase of mixed methods study:</p> <ul style="list-style-type: none"> five survey tools (documented general demographics and pain information and measured impact of pain on the family, resilience, perceived social support and wellness) completed by 36 participants. <p>After this:</p> <ul style="list-style-type: none"> nine partners conducted separately at a time and place most suitable for them, in-depth, semi-structured interviews till data saturation. Interviews 45-60 minutes (audio-taped with consent) Interviews carried out by C. West (first author) Interviews transcribed verbatim and stored for analysis <p>Data analysis</p> <ul style="list-style-type: none"> Using an interpretive, inductive approach, thematic analysis was conducted (suitable when little is known about phenomenon) Abstractions were grouped together into a category that explain the phenomena The raw data was analyzed by two of the researchers individually Together they worked on finding the same codes and categories <p>Ethics:</p> <ul style="list-style-type: none"> Ethical approval was received from the Human Research Ethics Committee of the university (approval number H2821). Participants were given an information sheet Those who agreed to be interviewed signed a consent form The Interview could be stopped at any time by the participants All participants were provided with the telephone number of a counsellor for follow-up support if needed. Pseudonyms were allocated to all transcripts to ensure anonymity 	<p>The impact of chronic pain on the family is extensive, resulting in physical, social, and emotional changes. Four themes with their subthemes were revealed:</p> <p>(1) Family loss, -Subthemes:</p> <ul style="list-style-type: none"> Financial Family, Friendships, Social activities <p>(2) Life changes, -Subthemes:</p> <ul style="list-style-type: none"> Relationships, Role reversal, Career/employment prospects. <p>(3) Emotional impact of pain, -Subthemes:</p> <ul style="list-style-type: none"> Self-blame Anger Fear <p>(4) Future plans. -Subthemes:</p> <ul style="list-style-type: none"> Expected outcomes of illness Ability to survive the experience <p>The results were reinforced with citations and stories from the participants</p>	<p>Results:</p> <ul style="list-style-type: none"> The findings of the study support previous findings that pain impacts all family members Financial losses due to unemployment Loss of friends possibly due to guilty feelings of leaving patients at home Role changes occur as the patient is unable to participate in household roles Intimate relationships are impacted by the diagnoses and are an important part of a thriving relationship. The results are discussed with existing literature. <p>Relevance for practice:</p> <ul style="list-style-type: none"> The findings suggest that partners and other family members also need to be supported and included in assessment, treatment and rehabilitation programs This could be in the form of written information and or direct discussions Nurses could take a leading role in the care planning and the increased involvement of family members This can be done with a family centered approach to care, which may lead to an improvement in the unity between partners, which may help the family to grow and even thrive despite the challenges of CP <p>Limitations of the study</p> <ul style="list-style-type: none"> Because CP is a term that covers a wide range of disorders, the experience of pain may differ between different pain causes, conditions and treatments All participants were Anglo-Saxon and from a single regional area. People from other cultures and different settings may have different experiences. Small sample size <p>Conclusion:</p> <ul style="list-style-type: none"> The findings support and provide an expansion of previous literature It shows that chronic pain impacts every aspect of family life and the importance of support of a loving and committed primary relationship.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: West, C., Usher, K., Foster, K., & Stewart, L. (2012). Chronic pain and the family: the experience of the partners of people living with chronic pain. Journal of Clinical Nursing, 21(23–24), 3352–3360

Critical Appraisal of the Study:

Chronic pain and the family: the experience of the partners of people living with chronic pain

Introduction	Method	Results	Discussion
<p>Introduction to the topic Prevalence and cost of chronic pain (CP) in Australia is cited. The impact of CP and chronic illnesses, not only in the patient, but also their partner and families are mentioned. Studies are used to show the impact chronic illnesses have on families including partners and how patients with chronic pain experience family life. The reason for the undertaking of the study is stated</p> <p>Significance of study The authors present various studies that have been undertaken to explore the experiences of patients with CP or the experiences of families and CP. For this reason, there is gap in literature research on the impact of CP on the partners.</p> <p>Purpose of study The purpose of the study is explicitly defined, but the link why it's important for nurses to understand the impact of chronic pain on the partners of patients, is missing. There is no research question.</p> <p>Author The first author (C West) is an associate Dean of Research at the James Cook University Australia The research funding is not mentioned</p> <p>Journal Publication: 2012 in the Journal of Clinical Nursing (Peer-reviewed Journal)</p>	<p>Design: The choice to use an interpretative qualitative design makes sense but is not explained why in the text.</p> <p>Setting: There is no further mention than that the study took place in Australia</p> <p>Sample: The size of the sample is comprehensible, but for the size of the whole population not representable. The participants are suited for the collection of information and experience the researched phenomena. The sample can be transferred to other partners experiencing the same problematic. Only Inclusion criteria are mentioned. Through purposive sampling of participants who had experience with the phenomenon, rigor was maintained.</p> <p>Data collection: The time period in which the study took place is not mentioned. The 45-60 minutes take for the interviews are sufficient to receive enough information. The questions placed during the interview related to the phenomena being researched is mentioned The method is explained. The data saturation was achieved after 9 out of 36 partners were interviewed. The participants autonomy was always considered. They could decide to stop the interview at any time. Trustworthiness was enhanced by continuing data collection until the same information was being heard (data saturation).</p> <p>Methodological reflection: The method concurs with the research approach. Personal bias is not mentioned.</p> <p>Data analysis The type of analysis used is appropriate for qualitative data analysis, for when little is known about a phenomenon. This involves open coding and the formation of abstract categories. The process of data analysis mentioned. Keeping a log of data collection and analysis decisions, combined with regular research team meetings during the analysis phase to discuss emergent categories, enhanced the rigor and trustworthiness of this study. Credibility and trustworthiness of the process was ensured in that two researchers individually analyzed the data and then together agreed upon the codes and categories. A log of analysis decisions was kept.</p> <p>Ethics The relevant ethical questions are clarified. It is unclear the relationship between the researchers and the participants.</p>	<p>The results reflect the comprehensiveness of the data and are significant. The results are classified into 4 main Categories and then subdivided into subthemes. These categories and codes are underlined with examples and citations. The categories describe the phenomenon as a whole and are logically explained.</p>	<p>Results Interpretations of the results help understanding the phenomenon better. The results are compared and discussed with existing literature.</p> <p>Relevance for practice The results are relevant for nurses as the recommendations for practice which are suggested can be implemented in real life.</p> <p>Purpose of the study With the help of the results, the purpose of the study is achieved</p> <p>No suggestions are made for further research.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* the article was published in the *Journal of Clinical Nursing (JCN)*, an international, peer reviewed, scientific journal; a log of data collection and analysis decisions was kept and combined with regular research team meetings; two researchers individually analyzed the data; data was collected until data saturation occurred.

*The **transferability** is shown through the following aspects:* inclusion criteria were named; the research took place in Australia, a western country which is comparable to Switzerland; the content and length of the interviews are described; data analysis is clearly described; the categorization of the participant's statements was clearly conducted; the chosen statements in the results were coherent and convincing.

*The **dependability** is shown through the following aspects:* international studies are used to build the theoretical background; ethical approval was obtained from the Human Research Ethics Committee; the process of study participant recruitment is clearly described; and the study design is suitable for the study question.

*The **confirmability** is shown through the following aspects:* the main author, a PhD candidate, was advised by two Professors of Nursing and an additional Nurse who possess a PhD; interviews were audio-taped with consent, transcribed verbatim and stored for analysis.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Söderberg, S., Strand, M., Haapala, M., & Lundman, B. (2003). Living with a woman with fibromyalgia from the perspective of the husband. *Journal of Advanced Nursing*, 42(2), 143–150.

Summary of the Study:

Living with a woman with fibromyalgia from the perspective of the husband

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Fibromyalgia (FM) is a chronic pain syndrome, which includes symptoms of fatigue, morning stiffness, sleep disturbances, dizziness, headaches and irritable colon <p>Theoretical Background</p> <p>Five studies show that FM has a big impact on patients' lives. They describe</p> <ul style="list-style-type: none"> feelings of loneliness and isolation Dependence on other people Struggle for dignity Lack of understanding Lack of support <p>The same five studies show that FM also affects the family. A study shows that the support of the family, especially spouses, is very important to the person living with FM</p> <p>Aim:</p> <p>to describe the husbands' experience of living with a woman with FM</p> <p>Relevance for practice</p> <p>Understanding this experience could help health care personnel in supporting and empowering spouses to women with FM.</p>	<p>Design: qualitative</p> <p>Setting: In a hospital in Sweden</p> <p>Sample:</p> <ul style="list-style-type: none"> Five husbands of women with FM (purposive sample) From a city in the northern part of Sweden between 50 and 60 years (md = 55) couples had been married between 25 and 40 years (md = 33) All families had children, one still had children living at home 4 men employed, 1 had retired early <p>Data collection:</p> <ul style="list-style-type: none"> Personal audio-taped interviews with a narrative approach were conducted (Mishler 1986, Sandelowski 1991), guided by prepared questions The interviews lasted about 45 minutes, took place in a quiet room at a nearby hospital were transcribed verbatim <p>Data analysis:</p> <ul style="list-style-type: none"> thematic content analysis was conducted by means of identification, codes, and categorization according to Patton 1990, Burnard 1991, and Downe-Wamboldt 1992. Each interview text was read through several times to gain holistic meaning. 38 categories were established, which lead to the 7 themes. To verify these 7 themes, the texts were reread <p>Ethics:</p> <ul style="list-style-type: none"> While no formal ethical permission was received, a letter containing information about the general nature of the study was sent to the participants before the interview, Participation was voluntary (Participants could withdraw from the study at any time) They were guaranteed confidentiality The findings were presented anonymously 	<p>The analysis resulted in the following seven themes:</p> <ul style="list-style-type: none"> increasing responsibility and work in the home: encroachment of husband's hobbies, increased economic difficulties being an advocate for and supporting the wife: advocacy for disablement pension and reducing the time spent with work as well as working from home learning to see the woman's changing needs: importance of reading body language, Flexibility when making plans. changing relationship between spouses: heightened consideration towards spouse necessary changing relationship with friends and relatives: reducing social circle for wife. Lack of understanding from friends who don't see the extent of FM deepening relationship with the children: Husbands became increasingly involved in child raising lacking information and knowledge about FM: Husbands report a lack of information from health care personnel and the authorities. Husbands desire more information, with which they can aid their wives 	<p>Results</p> <ul style="list-style-type: none"> Not only women with FM are affected by change in their lives, but also their spouses and families. The authors extensively supported each of their 7 themes with results from other studies. Many of these results can be compared with spouses living with patients suffering from any chronic illness <p>Relevance for practice</p> <ul style="list-style-type: none"> The knowledge that not only the patient but the spouse is also affected by the diagnoses has to be taken into consideration by health care personnel in care planning. There is a need for information about the women's illness. Health care personnel have a great responsibility to give information about the illness to enable husbands better to understand their wives and thus increase their support Care, support and acknowledgement from health care personnel are very important It is important to understand how people with chronic illnesses and their relatives experience the illness Key factors for support are the attitude and communication skills of health care personnel shown by another study <p>Limitations of the study</p> <ul style="list-style-type: none"> The findings cannot be generalized as it is a small sample The purposive sampling might lead to bias

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Söderberg, S., Strand, M., Haapala, M., & Lundman, B. (2003). Living with a woman with fibromyalgia from the perspective of the husband. *Journal of Advanced Nursing*, 42(2), 143–150.

Critical Appraisal of the Study:

Living with a woman with fibromyalgia from the perspective of the husband.

Introduction	Method	Results	Discussion
<p>Introduction to the topic There is no epidemiological data mentioned. With the help of six studies it is shown that FM has an impact on the patients and their families' lives.</p> <p>Relevance for Practice The relevance for practice/nurses is shown with the help of a study.</p> <p>Purpose of study The purpose of the study is explicitly defined. The link to why this is important for nurses is mentioned. There is no research question.</p> <p>Author The first author (Siv Söderberg) is an assistant professor in the division of nursing at the department of Health Science at the Lulea University of Technology in Lulea, Sweden</p> <p>Journal Journal of Advanced Nursing in 2003 Peer reviewed journal</p>	<p>Design: The choice to use a qualitative design makes sense and is explained why in the text.</p> <p>Setting: There is no further mention than that the study took place in Swedish hospital</p> <p>Sample: The sample is small, which means the results cannot be generalized. But that is not the purposive of qualitative research. Sample size was considered enough to achieve variation and to maintain depth in the analysis. Through purposive sampling the same characteristic of each participant can be researched. It provides theoretical richness in seeking to describe the experiences as richly and accurate as possible. All the participants are suited for the phenomenon to be researched. Inclusion criteria are not mentioned.</p> <p>Data collection: The time period in which the study took place is not mentioned. The 45-60 minutes take for the interviews are sufficient to receive enough information. The questions placed during the interview related to the phenomena being researched is mentioned The method is explained.</p> <p>Methodological reflection: The method concurs with the research approach. Personal bias is not mentioned.</p> <p>Data analysis Credibility and trustworthiness of the process was ensured in that the interviews were transcribed verbatim and then the text was reread to refine the chosen themes and all the authors discussed and agreed upon the seven themes. The analysis done by the first three authors was checked by the last author. This is supported in that the findings were presented to women with FM and their husbands in different occasions and they have recognized and agreed with these findings.</p> <p>Ethics There was no formal ethical permission received. The other ethical questions were discussed</p>	<p>The results reflect the comprehensiveness of the data and are significant. The results are classified into 7 main Categories and then subdivided into subthemes. These categories and codes are underlined with examples and citations. The categories describe the phenomenon, and are logically explained</p>	<p>Results Interpretations of the results help understanding the phenomenon better. The results are compared and discussed with existing literature.</p> <p>Relevance for practice The results are relevant for nurses as the recommendations for practice which are suggested can be implemented in real life.</p> <p>Purpose of the study With the help of the results, the purpose of the study is achieved</p> <p>No suggestions are made for further research. Limitations are mentioned.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* the article was published in the Journal of Advanced Nursing, an international, peer reviewed, scientific journal; the main author, an assistant Professor, was aided by two BSc nurses and an additional Professor of Nursing; regular research team discussions occurred; a research group and one researcher analyzed the data separately and came to near identical results. Triangulation took place in that the results of the study were given to various woman suffering from FM and their husbands at different times during the study. *Components which detract from this study's **credibility** are:* the authors' own viewpoints are not mentioned; no data saturation was reported.

*The **transferability** is shown through the following aspects:* the research took place in Sweden, a western country which is comparable to Switzerland; the content and length of the interviews are described; data analysis is clearly described; the categorization of the participant's statements was clearly conducted; the chosen quotes in the results were coherent and convincing. *A component which detracts from this study's **transferability** is:* inclusion criteria were not named.

*The **dependability** is shown through the following aspects:* international studies are used to build the theoretical background; ethical practices were followed; the process of study participant recruitment is clearly described.

*The **confirmability** is shown through the following aspects:* interviews were audio-taped with consent, transcribed verbatim and stored for analysis. *A component which detracts from this study's **confirmability** is:* The authors' view point are not mentioned.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Paulson, M., Norberg, A. & Söderberg, S. (2002). Living in the shadow of fibromyalgia pain: the meaning of female partners' experiences. *Journal of Clinical Nursing* 2003; 12: 235–243

Summary of the Study:

Living in the shadow of fibromyalgia pain: the meaning of female partners' experiences

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Fibromyalgia is a pain syndrome Fibromyalgia affects almost every aspect of an ill's person and their family's life The Meaning of partners own experience for what it is like living close to ill people has been poorly investigated <p>Aim: To explain the experience and the meaning of living with a partner who suffers from fibromyalgia pain</p> <p>Relevance for nurses Understanding this meaning could help to guide health care staff in supporting and helping female partners of men living with this illness</p>	<p>Design: Hermeneutic Phenomenology inspired by Ricoeur (1976) Setting: part of a larger project carried out at a rheumatology hospital in central Sweden. Sample: Fourteen female partners:</p> <ul style="list-style-type: none"> aged from 35 to 54 years (median=44.5) years they had lived with the man ranged from 6 to 26 years. Three partners reported having a chronic health problem themselves, most of them said that their physical health was good Six women worked full-time, six part time, one was on leave and one had a disability pension Six women lived in a city (two in houses and four in flats) and eight lived in the country (four in houses and four in flats) Three had an academic education, seven upper secondary school and three 9-year comprehensive school education. <p>Inclusion criteria:</p> <ul style="list-style-type: none"> being a woman who was married to or cohabiting with a man affected by pain according to the American College of Rheumatology's criteria for Fibromyalgia <p>Data collection</p> <ul style="list-style-type: none"> The men who participated in larger project were asked for permission Partners were contacted by telephone and by letter Interviews were done with a narrative approach Were asked about the meaning of their experiences by the first author. The interviews were tape recorded transcribed verbatim took place either in the women's homes (n = 4), at the researcher's office (n = 9), or over the telephone (n = 1) according to the participants' wishes. <p>Data analysis</p> <ul style="list-style-type: none"> Phenomenological hermeneutic interpretation Three phases <ul style="list-style-type: none"> -naive reading, getting a sense of the whole that provides direction for the next phase <p>Each interview was read several carefully, as open-mindedly as possible</p> <ul style="list-style-type: none"> -Structural phase: aimed at identifying parts and patterns that have meaningful consistency and at seeking an explanation of the text and validation of the naive understanding -critical in-depth interpretation of the text as a whole <p>Process is not linear, but a going back and forth.</p> <p>Ethics</p> <ul style="list-style-type: none"> Men gave permission that their partners be contacted. All participants gave their informed consent to participate in this study, Study was approved by the chief physician at the hospital and by the Ethics Committee of the Medical Faculty, Umea University, Sweden. There was no relationship of dependence between the researchers and interviewees. All participants were guaranteed confidentiality 	<p>During the structural analysis three themes and eight subthemes based on similarities and differences in meaning were found:</p> <ul style="list-style-type: none"> Struggling to give support and comfort -Endeavoring to give men courage -Feeling obliged to show constant consideration -Feeling compassion and simultaneously need of distance Struggling to keep going on -Feeling exhausted but having to endure -Feeling disturbed at men's reluctance to talk and their lack of patience -Hovering between hope and fear Experiencing lack of understanding and support -Feeling other people's sympathy and simultaneous suspiciousness -Lacking a holistic outlook in care 	<p>In the last phase of interpretation, the text is seen as a whole:</p> <ul style="list-style-type: none"> The meaning of being a female partner to a man with FM pain meant living in the shadow of the man's pain While struggling to give support and comfort, partners had to hold out and be strong to give men courage to carry out activities together. Partners were frustrated at the men's reluctance to communicate. This led to feelings of being excluded from men's emotions, which is supported by interviews with nurses and physicians who also observed this Men's lack of patience negatively affected the children A struggle to become reconciled to a changed life due to men's continuous pain, which threatens the whole family Gaining comfort outside the family helped partners to reach a new insight and appreciation for life, which was viewed from a renewed perspective. <p>Preexisting literature is used to support the above stated facts</p> <p>Relevance for practice:</p> <ul style="list-style-type: none"> Important that the healthy partner received the same information as the ill partner, so that the illness can become part of the family, which could help them to make sense of the men's illness. Partners need to be acknowledged by the health care system, so that the staff can help them to reach an effective balance by having a life beyond the illness <p>Limitations:</p> <ul style="list-style-type: none"> The finding of the study cannot be generalized, but can be transferred to similar situations if they are adapted to the new context

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Paulson, M., Norberg, A. & Söderberg, S. (2002). Living in the shadow of fibromyalgia pain: the meaning of female partners' experiences. *Journal of Clinical Nursing* 2003; 12: 235–243

Critical Appraisal of Study:

Living in the shadow of fibromyalgia pain: the meaning of female partners' experiences

Introduction	Method	Results	Discussion
<p>Introduction to the topic There is no epidemiological data. Previous studies are used to show the influence Fibromyalgia has on the patient and that it affects all their relationships. The reason for the study is mentioned</p> <p>Aim: The aim of the study is explicitly defined with a link as to why it's important for nurses to understand the impact of chronic pain on the partners of patients There is no research question.</p> <p>The significance of the study is discussed</p> <p>Author The first author (M. Paulson) is an Assistant Professor at the Department of Nursing and Health Sciences, Mid Sweden University, Östersund, Sweden The research funding is not mentioned</p> <p>Journal: Publication: 2002 in the Journal of Clinical Nursing (Peer-reviewed Journal)</p>	<p>Design The phenomenological hermeneutic approach that is inspired by Ricoeur (1991) is an appropriate design. There is an explanation to why this design was used: to explain the world that is opened by the text by showing new interpretations of the text of which the interviewer would otherwise be unaware. Through interpretation of texts we can learn more about phenomena and thereby understand and better explain the meaning of people's lived experience.</p> <p>Setting The rheumatology hospital in central Sweden is suited for the setting of the research for this phenomenon</p> <p>Sample: The larger project is not explained, besides that the men of the partners (the patients) took part in this study. The size of the sample is comprehensible, but for the size of the whole population not representable. The participants are suited for the collection of information and experience the researched phenomena. Inclusion criteria are mentioned. The sample can be transferred to other partners experiencing the same problematic. Through purposive sampling of participants who had experience with the phenomenon, rigor is maintained.</p> <p>Data collection The time period in which the study took place is not mentioned. The length of the interviews is not mentioned. The method/interview process was described very accurately with examples of questions asked. There is no information concerning the data saturation.</p> <p>Data analysis The interpretation of this method is clearly stated and explained In the first phase, the naive understanding, the text is read with an open mind. This ensures that there are no preconceived ideas would flow into the interpretation. There is a mention that preunderstanding bias is involved in this in interpretation process. Trustworthiness was shown in that the researchers described how the interpretations were produced and how the successive transformations were specified. The structural analysis is the objective part of the interpretation of the text, which is clearly defined in the text. The judging of the findings is clearly mentioned by the authors.</p> <p>Ethics The relevant ethical questions are clarified The authors clearly state that the findings are judged based on their preunderstanding</p> <p>Methodological considerations: The method concurs with the research approach.</p>	<p>The themes and subthemes are comprehensiveness and significant. They are portrayed in a table. These results are underlined with examples and citations. The themes describe the phenomenon and are logically explained.</p>	<p>The study is not portrayed according to the typical EMED format.</p> <p>Interpretations of the results help understanding the phenomenon better. The results are compared and discussed with existing literature. Methodological considerations are mentioned.</p> <p>Relevance for practice: The results are relevant for nurses as they portray the needs of the partners. With the knowledge of these needs, recommendations are suggested which can be implemented in real life.</p> <p>Purpose of study With the help of the results, the purpose of the study is achieved</p> <p>No suggestions are made for further research.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: Paulson, M., Norberg, A. & Söderberg, S. (2002). Living in the shadow of fibromyalgia pain: the meaning of female partners' experiences. *Journal of Clinical Nursing* 2003; 12: 235–243

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* the article was published in the Journal of Clinical Nursing (JCN), an international, peer reviewed, scientific journal; the researchers rigorously analyzed the data; the main author, an assistant professor of nursing, was advised by a full professor of nursing and another assistant professor of nursing. *Components which detract from this study's **credibility** are:* triangulation in the sense of Interview data being combined with observations, did not take place; the authors' own viewpoints or bias are not mentioned; and data saturation was not discussed.

*The **transferability** is shown through the following aspects:* the research took place in Sweden, a western country which is comparable to Switzerland; inclusion criteria were named; the content, length, and setting of the interviews are described; there is an in-depth description of the analysis process; the categorization of the participant's statements was clearly conducted; the chosen statements in the results were coherent and convincing. *A component which detracts from this study's **transferability** is:* no new research questions were identified.

*The **dependability** is shown through the following aspects:* ethical approval was obtained by the chief physician at the hospital and by the Ethics Committee of the Medical Faculty, Umeå University, Sweden; numerous international studies are used to build the theoretical background; and the process of study participant recruitment is clearly described. *A component which detracts from this study's **dependability** is:* No mention of any response to events during the study and no discussion on whether the authors considered the implications of any changes in the research design.

*The **confirmability** is shown through the following aspect:* Interviews were audio-taped and transcribed verbatim.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Richardson, J., Ong, B. & and Sim, J. (2007). Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support. *Sociology of Health & Illness*; 29: 347–365

Summary of the Study:

Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Research shows that chronic pain affects families Planning family activities can be difficult because pain is unpredictable Side-effects of being a care-giver are listed The "sick-role" theory is explained Examining the meaning of the patient's symptoms for family and loved ones is important <p>Significance of study:</p> <p>Previous literature has investigated the impact of pain and/or chronic illness on the family, but there is little information about living with chronic widespread pain in the context of the family</p> <p>Aim: This study's aim is to gather data on the experience of living with chronic widespread pain in order to examine the experience of chronic pain and the meaning of support for people with this condition in the context of their families.</p>	<p>Design:</p> <ul style="list-style-type: none"> Qualitative study Narrative approach Themes were selected and interpreted by authors <p>Setting: Stoke on Trent, UK</p> <p>Sample:</p> <ul style="list-style-type: none"> From the responders to The General Health Survey, participants were selected 8 participants (4 male, 4 female) All have chronic, widespread pain. Between 40 – 60 years old. Mix of professions <p>Data collection:</p> <ul style="list-style-type: none"> Three serial in-depth interviews were conducted per person to either highlight change or stability in the participants' progress. Each participant was interviewed by the main author. These interviews took place in a time frame ranging from two to four months. The first interview used a life grid; the second was a follow-up to the life grid interview; and the third interview reviewed an unstructured diary, which seven participants had completed. The diary interviews meant that whatever topics which arose in the diaries could be explored further. The participants were also asked to involve their families in the interview process. Five family members of participants (four spouses and one daughter) ended up being interviewed. <p>Data analysis:</p> <ul style="list-style-type: none"> Many strong quotes are included in the text and directly analyzed. Quotes from various participants are grouped together to support the authors' arguments. The analysis uses a combination of thematic and narrative approaches. The authors' analysis of accounts shifted from examining aspects such as specific words used by the participants, to regarding the narratives in a larger context of society. Authors endeavored to use analytical methods appropriate to the different stories relayed by participants. <p>Ethics:</p> <ul style="list-style-type: none"> The authors received ethical approval from the North Staffordshire Local Research Ethics Committee. Before and after each interview, participants gave their written consent the content of the interview to be used. Participants were exclusively identified by pseudonyms. 	<ul style="list-style-type: none"> Lengthy accounts and analysis on how the participants give and receive care and support in a family context. but the support was divided into two categories: <ul style="list-style-type: none"> Practical support emotional support <p>Practical Support:</p> <ul style="list-style-type: none"> Rather than to provide direct provision of practical support, it is preferable to anticipate and avert possible difficulties. This support helps to make those with chronic widespread pain feel appreciated. Affirmation of support paramount <p>Emotional support:</p> <ul style="list-style-type: none"> Emotional support is shown through dealing with those with chronic pain in a flexible manner. It mainly helps to validate the seriousness of the suffering person's claim to having chronic widespread pain and taking over the tasks which can no longer be done. 	<p>Ethical situations are discussed here, as well as that health is seen as a moral category just as much as any other aspect of everyday life, and essential normality needs to be displayed. The results are discussed in the context of a participants interview,</p> <p>Limitations: are not mentioned</p> <p>Relevance for practice</p> <p>Nurses should know that the sufferers:</p> <ul style="list-style-type: none"> May want to present themselves as normal people But also, must show that their pain makes them abnormal in many cases. They may be simultaneously presenting the 'ordinary', in the context of family life and relationships, and the 'extraordinary', regarding their pain as part of an attempt to be positive people despite their pain. It is to be noted that the concept of 'support' is more appropriate, in the context of chronic widespread pain, than that of 'caring'. Practical support is affected by both the uncertainty of pain and by the roles and responsibilities of other family members and helps to maintain valued identities of the person with chronic widespread pain. <p>Conclusion</p> <p>It is important that family members recognize the changing needs of the person with chronic widespread pain, or the efforts made by them to minimize the impact of the condition on normal family life.</p>

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Richardson, J., Ong, B. & and Sim, J. (2007). Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support. *Sociology of Health & Illness*; 29: 347–365

Critical Appraisal of Study:

Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support

Introduction	Method	Results	Discussion
<p>Introduction to the topic: While relevant, previous research was included, no epidemiological data to the phenomenon was included.</p> <p>Significance of study: The significance of the study is explained. Relevance for the nursing profession is not mentioned.</p> <p>Aim: The aim is clearly stated and differentiated into two sub-aims. No explicit research question was stated.</p> <p>Authors: Jane C. Richardson, Bie Nio Ong and Julius Sim <ul style="list-style-type: none"> No information is given regarding the authors Funding is not mentioned</p> <p>Journal: Publication: 2007 in the <i>Sociology of Health and Illness</i> Journal (peer-reviewed)</p>	<p>Design:</p> <ul style="list-style-type: none"> The narrative and interpretative approach of this study makes sense because it gives voice to the participants' own meanings and interpretations. The authors consider the participants as "active agents" who manage and respond to their illness. This study sets out to explore these experiences in a social setting, which shows that the authors desire the most realistic results possible. The narrative approach is employed by using the participants' stories to discover many features of chronic widespread pain in their daily lives. <p>Sample:</p> <ul style="list-style-type: none"> The recruitment strategy was appropriate to the aims of the research because only a small number of participants can realistically be interviewed in a qualitative study Of those who responded to the General Health Survey, several participants were selected. The exact selection process wasn't discussed The researcher has explained how the participants were selected. They explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study There were however no discussions concerning why some people chose not to take part. <p>Data collection:</p> <ul style="list-style-type: none"> The data was collected in a way that addressed the research issue The setting for the data collection wasn't mentioned It is clear how data was collected. An in-depth paragraph describes this process. The researchers have justified the methods chosen The researchers have made the methods explicit But, no information to a modification of the methods during the study was mentioned The form of data is clear But the researchers have not discussed saturation of data <p>Data analysis: The authors analyzed the interview results, not just according to contents, but specific words and the results in the context of society.</p> <p>Ethics:</p> <ul style="list-style-type: none"> In-depth discussion of ethical aspects of study was included All necessary ethical permission was obtained 	<ul style="list-style-type: none"> The authors place emphasis on including lengthy accounts on how the participants give and receive care and support in a family context. The support was divided into two clear and comprehensible categories: <ul style="list-style-type: none"> - practical support - emotional support These categories are simple and fit the data (in text participant quotes) well <p>Practical Support: The authors explain the way they have chosen their results. Extensive analysis is included to support their claims.</p> <p>Emotional support: The authors employ the same methods to obtain the results listed.</p>	<p>Results The results are discussed and compared with existing literature.</p> <p>Relevance for practice:</p> <ul style="list-style-type: none"> Researchers have discussed the contribution the study makes to existing knowledge and understanding. This research adds more data in the form of experiences and analysis of such experiences to the pre-existing body of literature on chronic pain. The studies own limitations are not mentioned. <p>Purpose of study:</p> <ul style="list-style-type: none"> It is to enrich the body of knowledge regarding the phenomena of chronic widespread pain in the context of family.

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: Richardson, J., Ong, B. & and Sim, J. (2007). Experiencing chronic widespread pain in a family context: giving and receiving practical and emotional support. *Sociology of Health & Illness*; 29: 347–365

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* that both the design and method used for this study are goal orientated. Triangulation took place in that an interpretative and narrative approach was adapted for the method. Honesty in informants was generated in that participants gave written consent for each interview, which was repeated at the end of the interview. The interviews took place over a period of two to four months, which helps in the buildup of relationships.

*The **transferability** is shown through the following aspects:* the data collection methods that were used are accurately reproduced as well as the time period over which the data was collected. The results are supported by citations. The study can be repeated in similar contexts.

*The **dependability** is shown through the following aspect:* The processes (data collection and analysis) within the study are well documented.

*The **confirmability** is shown through the following aspect:* the interviews were conducted by staff of science who had experience in qualitative research. *A component which detracts from this study's **confirmability** is:* Limitations of the study and the support from an external person are not mentioned.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Matheson, L., Harcourt, D., & Hewlett, S. (2010). 'Your whole life, your whole world, it changes': partners' experiences of living with rheumatoid arthritis. *Musculoskeletal Care*, 8(1), 46–54

Summary of the Study:

'Your whole Life, Your whole World, It Changes': Partners' Experiences of Living with Rheumatoid Arthritis

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Rheumatoid Arthritis (RA) is a chronic, systemic disease that is presented with joint inflammation, significant pain, fatigue and functional disability <p>Theoretical Background:</p> <ul style="list-style-type: none"> Quantitative research has shown that this condition has a huge impact on the partners quality of life (including psychological distress) as well. One study using a qualitative approach showed that RA had significant impact upon the marriage, social roles, self-esteem, work, financial burden and sexual problems Current research has shown the importance of partners in supporting patients with RA and the impact that the condition can have on them <p>Significance of study</p> <ul style="list-style-type: none"> Further research needed to investigate partners experience in depth <p>Aim:</p> <ul style="list-style-type: none"> To explore the experience of partners of people with RA 	<p>Design:</p> <p>Exploratory qualitative study (This enabled the researcher to understand the experiences of individuals in greater depth, as participants were not confined to the constraints of a quantitative questionnaire.)</p> <p>Setting: rheumatology outpatient clinic of the Bristol Royal Infirmary</p> <p>Sample:</p> <ul style="list-style-type: none"> Letter of invitation was sent to 50 participants (no response from 33 and nine declined) eight partners (between 48 and 73) of people who were diagnosed with RA for at least six months (purposive sampling). Partners: six male, two females. Some partners had relationships which began before the RA diagnosis, whereas others had entered the relationship after the diagnosis of RA <p>Data collection:</p> <ul style="list-style-type: none"> Semi-structured interviews between 40 and 80 minutes (audio recorded), conducted by the first author (consultant nurse was present for first interview) transcribed verbatim Interview schedule aimed to explore the issues as coping, which has not been examined by quantitative studies. <p>Data analysis:</p> <ul style="list-style-type: none"> Transcripts were analyzed thematically (Boyatzis, 1998) The transcripts were read by the first author systematically several times Common issues were identified, and codes were then assigned to all the data. Two additional researchers (the co-authors) read and analyzed a random sample of two transcripts Themes were then generated. A partner of an RA patient who was not interviewed also examined the findings and confirmed that the themes were valid and plausible. <p>Ethics:</p> <ul style="list-style-type: none"> Approval was obtained from North Somerset & South Bristol Research NHS ethics committee and from the University of the West of England, Bristol (UWE) 	<p>Five main themes emerged:</p> <ul style="list-style-type: none"> <i>Psychological burden</i> -as they experienced frustration and distress at watching their partner suffer and tried to protect their spouse from emotional and physical distress. <i>'It's a restricted life'</i>: -partners reported having to cut back on previously enjoyable shared activities and on their social life and had difficulty making future plans. <i>Adjusting lives:</i> -partners had to make considerable adjustments to many aspects of their lives and had adopted practical and psychological ways to cope. <i>'It's a joint approach'</i>: -many partners discussed adopting a joint approach to managing the RA. <i>Met and unmet support needs</i> -varied considerably, and many partners felt that a joint approach to treatment taken by health professionals is needed, which involves and recognizes their role. 	<p>Results:</p> <ul style="list-style-type: none"> The findings that partners carry various substantial psychological burdens are supported by quantitative literature This study shows how partners specifically cope with living with RA (including coping strategies) Many partners felt uninvolved and unrecognized by the hospital team, as care was focused on the patient More support from health professions is needed (support groups, more information and knowledge about RA) <p>Limitations:</p> <ul style="list-style-type: none"> during the recruitment stage, only eight out of a possible fifty partners agreed to participate. The sample of eight interviewees included only two women. there was a lack of younger partners in the study the needs of younger couples were not explored in depth <p>Future research</p> <ul style="list-style-type: none"> could examine the impact of RA on the whole family, including children and adolescent The needs and experiences of younger couples, using a qualitative prospective approach Quantitative research investigating partners; support needs in a larger sample could compare the met and unmet needs of male and female partners, and partners from a range of socioeconomic groups. The differing experiences of male and female partners could be further researched <p>Relevance for practice</p> <ul style="list-style-type: none"> A joint approach to treatment which involved and recognizes the partner s needed at all stages of the illness During initial stages: advice and information about symptoms, treatments and how other partners coped with RA, could be offered Partners be made aware of options of available support <p>Conclusion</p> <p>This study has highlighted the importance of the partner in managing RA and has given an insight into their experiences and the issues and challenges they face</p>

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Matheson, L., Harcourt, D., & Hewlett, S. (2010). 'Your whole life, your whole world, it changes': partners' experiences of living with rheumatoid arthritis. *Musculoskeletal Care*, 8(1), 46–54

Critical Appraisal of Study:

'Your whole Life, Your whole World, It Changes': Partners' Experiences of Living with Rheumatoid Arthritis

Introduction	Method	Results	Discussion
<p>Introduction</p> <ul style="list-style-type: none"> There is no epidemiological information. With pre-existing literature, the authors show that partners play a vital role in the health of patients suffering from RA, which is highly relevant for nurses. Since there is a lack of research in this area, the need for this study is explained. <p>Significance of study: There is a need of further research about the experience of partners. This would inform the development of interventions aimed at providing appropriate support for them</p> <p>Purpose of study The purpose of the study is clearly explained No research questions</p> <p>Author: The first author (<i>L. Matheson</i>) BSc, MSc, PhD, Is a Postdoctoral Research Assistant at the Centre for Appearance Research, Faculty of Health and Life Sciences, University of the West of England, Bristol</p> <p>Journal Published online in Wiley InterScience</p>	<p>Design: The design chosen suits the aim and is explained in a logical way.</p> <p>Setting: The Setting is suitable for the study to take place in</p> <p>Sample:</p> <ul style="list-style-type: none"> Purposive Sampling was chosen to allow a range of ages, gender, occupation, disease severity and duration were included. (participant demographic information) The size of the sample is suitable for a qualitative design (small group) sample is suitable for the question researched Recruitment of the sample is explained The heterogenous (sociobackgrounds, occupation) sample allows for a better generalization of a total population. The difference in length of relationships, gender and occupation of the partners give rise to different aspects of the phenomena <p>Data collection:</p> <ul style="list-style-type: none"> The procedure is accurately described. The time period of 40 to 80 minutes for the interview is sufficient to receive enough information The topics that were covered in the interview are mentioned (figure to interview schedule) To ensure credibility, the consultant nurse associated with this project was present during the first interview in order to observe and give feedback on interview style, which was used to improve the quality of the remaining interview The interview schedule was developed by the researchers based on reviewing previous literature no discussion was mentioned regarding whether the authors considered the implications of any changes in the research design. <p>Methodological reflection: The method concurs with the research approach. Personal bias is not mentioned.</p> <p>Data analysis The data analysis is precise and reliable. It shows credibility and trustworthiness in the sense that the first and the second author independently of each other analyzed the transcripts. A third person affected by the phenomenon confirmed the resulted themes. (Triangulation) All the researchers agreed on the themes and that they were prevalent to the data</p> <p>Ethics: Approval from two independent ethics committee. The relevant ethical questions are clarified. It is unclear the relationship between the researchers and the participants.</p>	<p>The results are in detail and differentiated presented. They are divided into logical themes, explained and underlined with citations. The themes are displayed with a logical diagram</p>	<p>Results: The current study results are compared with existing literature and shows that this study gives various new insights, among others into how partners specifically cope with living with RA</p> <p>Relevance for practice The results are relevant and useful in nursing, even though these range of unmet needs highlight a challenge facing healthcare professionals. Concrete ideas for support are given for the different stages of the illness</p> <p>Limitations of the study are openly discussed Suggestions for future research are made</p> <p>Purpose of the study With the help of the results, the purpose of the study is achieved</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: Matheson, L., Harcourt, D., & Hewlett, S. (2010). 'Your whole life, your whole world, it changes': partners' experiences of living with rheumatoid arthritis. *Musculoskeletal Care*, 8(1), 46–54

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* the main author, who has a M.Sc. in health psychology, was advised by two additional authors who poses a PhD; the researchers precisely and reliably analyzed the data. *Components which detract from this study's **credibility** are:* Triangulation in the sense of Interview data being combined with observations, did not take place; the authors' own viewpoints or bias are not mentioned; data saturation was not discussed.

*The **transferability** is shown through the following aspects:* The research took place in England, a western country which is comparable to Switzerland; inclusion criteria were named; the content, length, and setting of the interviews are described; the categorization of the participant's statements was clearly conducted; the results section is richly laden with coherent and convincing quotes; there is an in-depth description of the analysis process; new research questions were identified.

*The **dependability** is shown through the following aspects:* the theoretical background is composed of numerous references to international studies; ethical approval was obtained from North Somerset & South Bristol Research NHS ethics committee and from the University of the West of England, Bristol; the choice of methodology is well defended; the process of study participant recruitment is clearly described. *Components which detract from this study's **dependability** are:* A response to events during the study was not mentioned, and no discussion was mentioned regarding whether the authors considered the implications of any changes in the research design.

*The **confirmability** is shown through the following aspects:* Interviews were conducted by the first author and transcribed verbatim.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Jacobi, C. E. (2003). Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients. *Rheumatology*, 42(10), 1226–1233.

Summary of the Study:

Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Rheumatoid arthritis (RA) is a chronic, inflammatory disease that mostly affects the joints of the patients Previous studies have shown that after 10-20 years most of the patients were moderately disabled Due to the physical impairments and disabilities of the patients with RA, the spouses and families are expected to bear a large proportion of the burden of caregiving The Caregiver Reaction Assessment (CRA) has been developed to assess caregiver burden in five dimensions, including both positive and negative burdens of caregiving. This multidimensional approach gives the opportunity to plan specific intervention strategies for caregivers. <p>Purpose of study:</p> <ul style="list-style-type: none"> To determine the objective burden variables of patients suffering from RA and their partners 	<p>Design</p> <ul style="list-style-type: none"> Longitudinal, cohort study Was the third follow-up of a longitudinal study on health and health-care among patients with RA that started in 1997 among 882 patients <p>Sample:</p> <ul style="list-style-type: none"> Patients (n=134) selected from the register of a large rheumatology out-patient clinic in Amsterdam and five associated out-patient clinics Mean age of the patients: 61.9 years (range 28.1-84.9, SD 13.0) Mean age of partners: 62.7 years (range 32.5-86.8, SD 12.9) Mean disease duration: 12.7 years (range 3-59.8, SD 9) <p>Inclusion criteria:</p> <ul style="list-style-type: none"> At least 16 years of age Had to meet the 1987 revised American College of Rheumatology (ACR) criteria Informal care needed to be from the partner or spouse <p>Data collection</p> <ul style="list-style-type: none"> Undertaken in 2001 two self-report questionnaires, one for the partner and one for the patient. <p>Partners variables</p> <ul style="list-style-type: none"> Sociodemographic characteristics-age and gender, same for patient Health status, EuroQoL questionnaire, 5 dimensions of health <p>Patient variables</p> <ul style="list-style-type: none"> Disease duration-taken from the patients file, Professional home care <p>Objective caregiver burden</p> <ul style="list-style-type: none"> Tasks required to care for the patient, Care duration <p>Data analysis</p> <ul style="list-style-type: none"> performed using SPSS Frequency tables and descriptive statistics were assessed for all variables The relation between each of the five dimensions of subjective caregiver burden: Spearman correlation ($p \geq 0.4$) A multivariate linear regression model for each of the five dimensions of subjective caregiver burden. Variables significance: $P < 0.05$ <p>Ethics</p> <ul style="list-style-type: none"> The medical ethical committee of the Slotervaart Hospital Amsterdam approved the study design. All patients signed informed consent. The authors declare that there are no conflicts of interests This study was supported financially by the Dutch Arthritis Association (het Nationaal Reumafonds) and the Netherlands Organization for Health Research and Development—Medical Sciences 	<p>Partner and patient variables:</p> <ul style="list-style-type: none"> Only three patients (2.3%) did not suffer from pain/discomfort; 93 (69.9%) did not suffer from anxiety/depression. Of the partners, 69 (53.1%) did not suffer from pain/discomfort, and 103 (78.0%) did not suffer from anxiety/depression. <p>Objective caregiver burden</p> <ul style="list-style-type: none"> Objective caregiver burden consisted of care tasks for 40.3% of the partners (n= 54), of home tasks for 97.0% (n = 130) and of help tasks for 77.6% (n = 104). Care tasks took on average 41.78 min a day to accomplish. For home tasks and help tasks, on average 2.58 h and 0.75 h a day were needed respectively. Partners were giving care over an average of 11.4 year and almost 6 days a week <p>Correlation between subjective caregiver burden dimensions</p> <ul style="list-style-type: none"> Self-esteem was negatively correlated with lack of family support ($r = -0.425$) and loss of physical strength ($r = -0.507$). Lack of family support was positively correlated with financial problems ($r = 0.405$) and with loss of physical strength ($r = 0.622$), and financial problems and loss of physical strength were positively correlated ($r = 0.588$) Giving care to a patient with RA decreased the self-esteem of the partner if the partner had problems with ADL and if the patient received home care 	<p>The results are compared with previous studies</p> <ul style="list-style-type: none"> Caregiver burden is common among partners of patients with RA. Negative aspects of subjective caregiver burden were mostly caused a disrupted schedule and the to a smaller degree because of a lack of family support, financial problems and loss of physical strength. There was a high burden on the loss of physical strength dimension among partners of RA patients. Negative experiences resulting from giving care may increase as the duration of care provision increases Patient problems with self-care activities, ADL and partner problems with mobility or pain/discomfort had a large impact on negative levels of subjective caregiver burden in partners of RA patients. <p>Relevance for practice</p> <ul style="list-style-type: none"> Due to the shift from a health care setting to an ambulatory care setting, there has been an increase in the burden of the partners, which often goes forgotten. These results can be used to identify partners at risk of high negative burden This may lead to the development of support strategies for the partner <p>Limitations</p> <ul style="list-style-type: none"> Most of the caregiving partners (82%) were male, other studies have shown that female caregivers perceive greater burden Many caregiving partners did not respond, while the patients they cared for did. This information about the partners went missing. The CRA provides no overall burden score, which makes it difficult to reach a conclusion regarding overall caregiver burden. The RA patients included in this study might have suffered from comorbidity. Therefore, the caregiver burden might not have only apply to the RA. <p>Further research</p> <ul style="list-style-type: none"> May help to establish evidence-based interventions by developing specific support strategies for caregiving partners of patients with RA.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Jacobi, C. E. (2003). Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients. *Rheumatology*, 42(10), 1226–1233.

Critical Appraisal of Study:

Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients

Introduction	Method	Results	Discussion
<p>Background: Previous studies are used to show the impact RA has on the partner and their families. The reason for undertaking this study is mentioned.</p> <p>Purpose of study The purpose of the study is defined, but the link why it's important for nurses to understand the impact of RA on the partners of patients, is missing. There is no research question.</p> <p>Authors The main author works at the Department of Decision Making at the Leiden University Medical Centre in Leiden in the Netherlands. No interest conflicts are noticeable. Funding is mentioned.</p> <p>Journal: Publication: June 2003 in the <i>Rheumatology Journal</i> (peer reviewed)</p>	<p>Design The chosen study design is understandable.</p> <p>Setting: The study mentioned where the participants were recruited.</p> <p>Sample: The size of the sample is representable for the population. Inclusion criteria are mentioned. The setting is clearly explained. All the participants experience the phenomena to be researched and are therefore suitable as a sample. Drop outs are not mentioned.</p> <p>Data collection It is only mentioned that the participants filled out a questionnaire, no other information. The method for the data collection is the same for all participants. The data is complete in the sense that it is collected from all participants.</p> <p>Data analysis The data analysis is clearly described. The Spearman correlation was defined before the analysis. The measuring instrument are valid and reliable. The statistical data can be used for to make an evaluation.</p> <p>Ethics The ethics are discussed. It is unclear the relationship between the researchers and the participants.</p>	<p>The results are displayed in table form, which are precise and complete. They are an addition to the rigorous description of the text.</p>	<p>All the results are discussed and underlined with existing literature.</p> <p>Limitations are presented and discussed. The relevance for practice is mentioned.</p> <p>Conclusion This study can be able to be repeated within another clinical setting. There are suggestions for further research.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: Jacobi, C. E. (2003). Dimension-specific burden of caregiving among partners of rheumatoid arthritis patients. *Rheumatology*, 42(10), 1226–1233.

Quantitative: General assessment according to Bartholomeyczik (2008)

*The **objectivity** is shown through the following aspects:* all information regarding disease duration was taken from the patients' files and thus was not influenced by the authors; no conflicts of interest were reported. The same assessment instrument was used for all participants.

*The **reliability** is shown through the following aspects:* the study is the third follow-up of a longitudinal study on health and health-care among patients with RA; the process of study participant recruitment is comprehensibly described, the study has been published in peer-reviewed journal, British Society for Rheumatology, which is the UK's leading specialist medical society for rheumatology and musculoskeletal professionals.

*The **validity** is shown through the following aspects:* the main instrument used, the Caregiver Reaction Assessment (CRA) is five-dimensional and has been internationally shown to be valid, the multivariate linear regression model shows validity.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Fallatah, F., & Edge, D. S. (2015). Social support needs of families: the context of rheumatoid arthritis. *Applied Nursing Research*, 28(2), 180–185.

Summary of the Study:

Social support needs of families: the context of rheumatoid arthritis

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Rheumatoid arthritis (RA) affects 1% of Canadians Women are twice as likely to be affected than men The family unit can be considerably strained by the psychosocial effects and changes that come with dealing with a relative's illness While much research has been done to better understand those who suffer with RA or those who professionally care for patients with RA, little research has been done on the lives of family care givers <p>Significance of study: The more nurses understand the needs of relatives who care for their ill family members, the better equipped they will be to provide care-giving relatives with the much-needed information they desire</p> <p>Aim: Twofold:</p> <ul style="list-style-type: none"> To explore how relatives of those with RA experience life as they care for their family member with To understand what kind of support the relatives need as they care for their ill family members 	<p>Design: A descriptive qualitative study was selected and employed within the naturalistic inquiry approach.</p> <p>Setting: two primary health care clinics in eastern Ontario, Canada</p> <p>Sample: inclusion criteria:</p> <ul style="list-style-type: none"> a family member of an individual with RA (family member defined by blood relation, marriage or common traditions or beliefs) speaks English is a legal adult <p>Recruitment methods:</p> <ul style="list-style-type: none"> large descriptive posters describing the study mini posters to take home from either the Arthritis Society or from two primary health care clinics in eastern Ontario, Canada word-of-mouth recruitment recruitment advertisements on Kijiji® and Craigslist®. Word-of-mouth strategy most effective method (provided six of seven participants) Recruitment was terminated due to data saturation and time constraints <p>Data collection:</p> <ul style="list-style-type: none"> Interviews were recorded digitally and took place either in the homes of participants or in a public setting. Interviews lasted for 60–90 minutes They were conducted by the first author, who used an interview guide, which contained questions and enquiries to involve the participants in explaining their stories. The interview guide was developed by the first author. Sample questions are included in the study To aid the data analysis, questions regarding demographic and genogram data were posed <p>Data analysis: Qualitative direct content analysis</p> <ul style="list-style-type: none"> Interviews were transcribed and reviewed several times by the researchers to ascertain whether clarification or elaboration was necessary Codes were created individually by the researchers and then compared and combined. In addition, predetermined codes from the social support concept were also used. Statements that didn't fit with the initial coding scheme were given a new code Peer review of transcripts and codes <p>Ethics:</p> <ul style="list-style-type: none"> Approval was gained from the University Health Sciences Research Ethics Board before the study was conducted. Written consent was obtained from interested potential participants Only pseudonyms are used in the study and were chosen by the participants. 	<p>Answer to first research question: family experience</p> <ul style="list-style-type: none"> effect of the disease <ul style="list-style-type: none"> emotional (feeling worried, sad, helpless, shocked) lifestyle changes reshaping the relationship <ul style="list-style-type: none"> better relationship provider of support to the person suffering from RA <ul style="list-style-type: none"> emotional support instrumental assistance ("pitching in", accommodating the relative with RA, providing financial support) <p>Answer to second research question: Nature and form of social support</p> <ul style="list-style-type: none"> Social support needs of family members (emotional) <ul style="list-style-type: none"> Emotional instrumental (help taking care, financial) information adapted according to cultural differences and education levels Finding balance and coping <ul style="list-style-type: none"> accepting the illness Alone time of the family member 	<p>Relevance for practice:</p> <ul style="list-style-type: none"> This study adds to previous research that emphasizes that family care givers of those with chronic illnesses require social support themselves in order to retain a healthy life balance and to deal with their relative's illness. It is essential that nurses recognize the uniqueness of each component of the family unit and are aware that they all require social support in some form. Nursing interventions can be applied in several situations for those dealing with RA During the diagnosis of RA, it is especially important that nurses are not only aware of the range of intense emotions felt by the family but that they also assess such emotions. Information provided by nurses should be suitable for the educational and cultural backgrounds of the patients and their families. Medical jargon should be avoided Follow-up appointments should be scheduled Nurses should educate their patients on the benefits of joint splints 7 adaptive equipment and provide them with such Nurses should ascertain how much information a patient and their family require regarding pharmacological and non-pharmacological methods to deal with RA pain and discomfort. Nurse should guide patients to other professionals who can aid them in further sectors of life <p>Limitations</p> <ul style="list-style-type: none"> Partners who were most in need of support didn't have time to take part in the study; selection bias. Small sample size <p>Recommendations for future research</p> <ul style="list-style-type: none"> In-depth investigation of female partners, adults and young children of people affected with RA

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Fallatah, F., & Edge, D. S. (2015). Social support needs of families: the context of rheumatoid arthritis. *Applied Nursing Research*, 28(2), 180–185.

Critical Appraisal of Study:

Social support needs of families: the context of rheumatoid arthritis

Introduction	Method	Results	Discussion
<p>Phenomenon: Thorough background information is included for the phenomenon to be understood</p> <p>Significance of study The significance of the study is mentioned and the relevance for nurses</p> <p>Aim: The aim, though twofold is comprehensible and clear.</p> <p>Author: The first author is from the Arthur Labatt Family School of Nursing of the University of Western Ontario, Canada. The research funding is not mentioned.</p> <p>Journal: Publication: 2015 in the <i>Journal of Applied Nursing Research</i> (peer-reviewed)</p>	<p>Design: The authors defended their study choice, by means of the following reasoning: Such an approach provides a wide summary of an experience through the perspective of the participants using basic language</p> <p>Sample:</p> <ul style="list-style-type: none"> - Thorough detailing of recruitment methods - Valid reasons for termination of recruitment were given - Sample size of 7 participants is appropriate for such qualitative research - Data saturation when no new themes emerged <p>Data collection:</p> <ul style="list-style-type: none"> - Process described in detail, no mention if the participants or the authors chose the location. - Authors explain their choices in detail - Guide is explained well (i.e. sample questions are provided) - Authors explain that certain data (i.e. demographic and genogram data) was collected to better understand the characteristics of participants and their family members with the goal of aiding the data analysis process. <p>Data analysis:</p> <ul style="list-style-type: none"> • No mention of the how the data was transcribed • Internal peer review • Extremely toughing and comprehensible description of data analysis process • Author used work by Graneheim & Lundman, 2004 to attain trustworthiness • Credibility was established by using an open-ended interviewing techniques and question guide as well as a reflexive journal • Transferability (background and selection and distinctiveness of participants, methods, settings, data collection and analyzing process) was shown in the thorough description of all necessary points to determine how to apply the current research findings to another context. • Confirmability was shown through the clarification of what motivated the authors to pursue this area of research <p>Ethics: Ethical consideration present and rigorous ethical measures were performed</p>	<ul style="list-style-type: none"> - More than sufficient answers are provided to answer both aspects of the study's aim - Many, strong direct quotes are employed in explaining the codes. - Comprehensible codes are displayed in an accessible manner 	<p>Results Interpretations of the results help understanding the phenomenon better. The results are compared and discussed with existing literature.</p> <p>Relevance for practice The authors describe this study's relevance for nurses in very detailed, realistic, and specific ways.</p> <p>Purpose of the study With the help of the results, the purpose of the study is achieved</p> <p>Limitations and Further Research</p> <ul style="list-style-type: none"> - Two limitations regarding the various states of participants' health and selection bias were stated, showing that the authors have considered weak points in their results. - The authors also acknowledge that small sample size means that the results may not be transferable to many patients. - The effect of culture on the social support and coping of family members of people with RA was named as a possible point of further research. This seems plausible.

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: Fallatah, F., & Edge, D. S. (2015). Social support needs of families: the context of rheumatoid arthritis. *Applied Nursing Research*, 28(2), 180–185.

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* Two additional colleagues, from the research committee, confirmed the emerged themes from the interviews as they had reviewed the transcribed interviews and the analysis each individually; the authors used an open ended interviewing techniques and question guides; a reflective journal was used to confirm that the data was accurately documented.

*The **transferability** is shown through the following aspects:* there is a thorough description of the background and selection and distinctiveness of the participants. The methods, settings, data collection and analyzing process was clearly described to help the reader in finding out if the current research findings can be transferred to another context; the results are underlined with plausible citations to help with further research.

*The **dependability** is shown through the following aspects:* each interview was transcribed shortly after the interview and reviewed numerous times by the researchers.

*The **confirmability** is shown through the following aspects:* the motivation and reasons for pursuing this area of research were clarified through presenting the researcher's personal experiences, beliefs, and preconceptions, about the research topic; self-reflection and external review were achieved once these descriptions were disclosed in writing.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: West, C., Buettner, P., Stewart, L., Foster, K., & Usher, K. (2012). Resilience in families with a member with chronic pain: a mixed methods study: Resilience in families with a member with chronic pain. Journal of Clinical Nursing, 21(23–24), 3532–3545.

Summary of the Study:

Resilience in families with a member with chronic pain: a mixed methods study

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Chronic pain impacts on the entire family. The literature suggests that it is possible to strengthen resilience in individuals with chronic conditions, but little is known about the impact of chronic pain on family resilience. The following terms are defined: CP and family resilience <p>Relevance for nurses:</p> <ul style="list-style-type: none"> It is important that nurses and healthcare professionals include family members when planning and delivering care for persons with chronic pain. Identification of strengths within families can help tailor nursing interventions to meet family needs. <p>Aim: To measure and explore between 2007–2010 the nature of family resilience in the context of families with a member with chronic pain.</p>	<p>Design: A explanatory sequential mixed method study was undertaken: Quantitative and Qualitative</p> <p>Sample:</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Had a chronic non-malignant pain condition diagnosed by a medical practitioner and/or was a family member of a person with chronic pain. Lived in a family situation and/or household situation as defined by the United States of America Census Bureau (2005). Were over the age of 18 years and willing to consent to the study. Were proficient in spoken and written English. <p>Exclusion criterion:</p> <ul style="list-style-type: none"> Additional disease or actively unwell with a psychiatric illness. <p>Sample size:</p> <ul style="list-style-type: none"> A total of 31 families comprising 67 family members agreed to participate. <p>Data collection:</p> <ul style="list-style-type: none"> initial quantitative phase: assessment measures were administered using the Connor-Davidson Resilience Scale, Family Impact of Pain Scale, Medical Outcomes Study Short Form 36 and Medical Outcomes Study Social Support Survey. In the second, qualitative phase, follow-up semi structured interviews were undertaken with 10 families (chosen according to their willingness to consent and that they completed all quantitative data collection) to help explain the quantitative results. <p>Data analysis:</p> <p>Quantitative statistical analysis:</p> <ul style="list-style-type: none"> The Connor-Davidson Resilience Scale (CD-RISC) was used as a measure for resilience. independent t-tests, Analysis of Variance Pearson's and Spearman's correlation coefficients. Multiple linear regression analysis was conducted for the entire data set <p>Ethics:</p> <ul style="list-style-type: none"> Approved by the University Human Research Ethics Review Committee Participants were provided with an information sheet, and knew they could drop out of the study at any time Pseudonyms were used in all transcripts. The data were stored securely during the research process 	<ul style="list-style-type: none"> The impact of pain on the family was high overall but the perceived impact was greater for the person with pain. Resilience scores were above average for both the person with pain and other family members. However, the person with pain scored lower on the resilience scale than other members of the family. The families scored high for social support overall, while the person with pain perceived they had greater support than their family members. The one factor identified by all* participants (*both the person with pain and other family members) was the importance of commitment from a partner or soul mate (n = 10) A positive outlook, patience or tolerance, and commitment and cohesion with a partner were regarded most highly 	<ul style="list-style-type: none"> Overestimation of pain and disability can lead to negative consequences for the person with pain This is because as it reinforces the sick role and overprotection by the spouse or family. However, underestimation of pain can give the individual the feeling they are not being taken seriously, which may be seen as unhelpful by the person with pain and lead to criticism by the partner or family member <p>Limitations:</p> <ul style="list-style-type: none"> The different kinds of pain experienced by the participants, the different lengths of the experience with chronic pain Method of the sampling (might have been selection bias) Perceptions of the individuals are separately assessed, then as a family as a whole. <p>Relevance for practice:</p> <ul style="list-style-type: none"> the strengths or resilient properties inherent in families need to be identified those strengths need to be used in the planning and implementation of care This is especially true of chronic conditions such as chronic pain, in which such planning is pivotal to quality health outcomes.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: West, C., Buettner, P., Stewart, L., Foster, K., & Usher, K. (2012). Resilience in families with a member with chronic pain: a mixed methods study: Resilience in families with a member with chronic pain. Journal of Clinical Nursing, 21(23–24), 3532–3545.

Critical Appraisal of Study:

Resilience in families with a member with chronic pain: a mixed methods study

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Thorough and relevant background information from various, international studies is used The terms Chronic Pain is defined, and the complexity of the definition is explained. Family Resilience are defined. No epidemiological data Relevance for nurses and other health care professions is defined. <p>Aim: The aims are clearly defined with clear follow up research questions.</p> <p>Author The first author (C West) is an associate Dean of Research at the James Cook University Australia Funding: no specific grant has been allocated to this study. The author received a 1-year scholarship and special study leave for the school of Nursing.</p> <p>Journal Publication: 2012 in the Journal of Clinical Nursing (Peer-reviewed Journal)</p>	<p>Design: The mixed-method combination of both quantitative and qualitative methods is appropriate for the phenomenon and aim of the study</p> <p>Sample: Quite a large sample size for qualitative research. This required much work but is still appropriate. The participants are suited for the collection of information. Inclusion and exclusion criteria are mentioned</p> <p>Data collection: Time period of data collection is mentioned. The extensively tested scales (i.e. VAS) used are shown to be reliable, valid and consistent. The appropriate measuring scales are used. The same questionnaire was used for all participants.</p> <p>Authors show transparency through sample questions of the interviews</p> <p>Data analysis: Numerical data is provided to support the results of the Connor-Davidson Resilience Scale (CD-RISC), independent t-tests, analysis of Variance, Pearson's and Spearman's correlation coefficients, and multiple linear regression analysis.</p> <p>Ethics: Thorough ethical consideration is presented</p>	<p>The results addressed all areas of the study questions.</p> <p>Both the quantitative and qualitative data are presented and supported with data.</p> <p>This section of the paper is left concise and only the main points which emerged were presented.</p> <p>No interpretation of results is apparent in the results section.</p>	<p>The repetition of the study's aim provides clarity and is a useful segue into the following discussion</p> <p>Results: The results are shown in a clear manner by means of multiple tables</p> <p>Relevance for practice:</p> <ul style="list-style-type: none"> The authors explicitly name the benefits of this study for Nurses Information is provided regarding what nurses should do with the information Strong link to nurses and is very relevant for the nursing practice <p>Limitations of the study: The limitations of the study are critically discussed on multiple levels.</p> <p>No suggestions are made for further research.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: West, C., Buettner, P., Stewart, L., Foster, K., & Usher, K. (2012). Resilience in families with a member with chronic pain: a mixed methods study: Resilience in families with a member with chronic pain. *Journal of Clinical Nursing*, 21(23–24), 3532–3545.

Quantitative: General assessment according to Bartholomeyczik (2008)

*The **objectivity** is shown through the following aspect:* selection bias might have made it difficult for the researches to detect associations.

*The **reliability** is shown through the following aspects:* all five of the questionnaires that were used had been tested before and proved to be reliable; a Cronbach's Alpha for the required questionnaires was set before the data analysis.

*The **validity** is shown through the following aspects:* the study design suits the research question asked; the measuring instruments measure what the authors want to research.

Qualitative: General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* during the last phase of the content analysis, the themes and subthemes were quantified, to identify the frequency that each came up; this helps with the internal generalizability of conclusions and provides a check against analytic bias.

*The **transferability** is shown through the following aspects:* Quotes from participant interviews have been used to support the findings; purposive sampling of participants with experience of chronic pain or having a family member with chronic pain, had been undertaken.

*The **dependability** is shown through the following aspects:* The analytic process was undertaken separately by two members of the research team, who afterwards reached a consensus on the codes to be used; the data collection was accurately described; the study design mixed methods fitted the research aim and questions and ensured that all data was integrated.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: L.Martire , R. Schulz , F. Keefe , T. Starz , T. Osial Jr. , M. Dew & C. Reynolds III (2003) Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers, Aging & Mental Health, 7:1, 53-60

Summary of the Study:

Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers

Introduction	Method	Results	Discussion
<p>Background:</p> <ul style="list-style-type: none"> Osteoarthritis (OA): a musculoskeletal disease, shown mostly by chronic pain and physical disability, prevalently in persons 65+, associated with an increase in depressive symptoms Reactions of spouses can positively and negatively affect patients with arthritis OA is affected by lifestyle decisions Past studies have shown that an Inclusion of spouse in psychosocial treatment has been positive Spouses benefit from being included in treatment: less stress, less depressive symptoms, feel more adept at caregiving The Arthritis Self-Help Course (ASHC) is introduced <p>Significance of study: The ASHC focuses only on helping the patient on managing OA, it does not involve the family in helping the patient or any support for the family.</p> <p>Purpose of study:</p> <ul style="list-style-type: none"> To see if the couple-centered sessions (ASHC) offer more benefits than patient-centered sessions (ASHC-PS) <p>Prediction:</p> <ul style="list-style-type: none"> The couple intervention would lead to greater improvements in the patient's pain, disability, depressive symptoms, and arthritis self-efficacy. 	<p>Design: Quantitative pilot design</p> <p>Setting: two Rheumatology clinics in Pittsburgh, USA. No exact location is named, but it didn't take place at the participants' homes.</p> <p>Sample:</p> <ul style="list-style-type: none"> 126 suitable (i.e. age, gender, diagnosis, and marital status) patients from two rheumatology clinics in were sent a letter describing the study 68% (n=85) of the contacted couples declined to take part before screening began 24 women patients with OA of the lower extremities or back were selected along with their husbands Total number of participants (n=48) <p>Inclusion criteria The woman had</p> <ul style="list-style-type: none"> be above the age of 60 be married and live with the husband have pain in the past month, struggle to carry out personal care or daily activities receive help from their husband with at least one daily activity previously not gone to the ASHC <p>Data collection:</p> <ul style="list-style-type: none"> Participants were in depth and structurally interviewed prior to random selection to the two groups 11 couples were assigned to the ASHC group 13 couples were assigned to the ASHC-PS group The two trained ASHC interventionists led three sessions of each group <p>Patient intervention:</p> <ul style="list-style-type: none"> ASHC: 6 weekly two-hour sessions Patients were educated about issues as the etiology and treatment of arthritis, strategies for managing pain and strengthening joints, and ways of effectively coping with the negative emotions resulting from arthritis Communication between patients within and outside the course was encouraged as to support each other In the standard ASHC friends and family members could attend, but were not required (in this study patient's spouse or other family members or friends were not allowed to attend) <p>Couple intervention:</p> <ul style="list-style-type: none"> ASHC-PS: same 6 weekly two-hour sessions as the control group, but supplemented by 20 minutes of couple-oriented education following each session Couple orientated education addressed both the pragmatic (ways in which spouses can help in pain management and effective strategies to help with everyday activities) and emotional aspects (emotional support and strategies 	<p>Participant data</p> <ul style="list-style-type: none"> Average age of patients: 71.8 years Average age of husbands: 73.8 Caucasian couples: 96% Patients' average years of education: 13.8 Husbands' average years of education: 14.6 Average years of marriage: 46.3 Household income between \$30 000 and \$39 000 Average years of having arthritis: 18 Location: knees (92%) hands (75%) and back (67%) Six participants had a second form of rheumatic disease <p>Feasibility data</p> <ul style="list-style-type: none"> High attendance rates for ASHC-PS group: patients had an 89% attendance rate, husbands 83% Significantly (p<0.05) lower attendance by patients (58%), in the ASHC group Patients with poorer attendance, reported less arthritis self-efficacy (p=0.01) and a trend toward more depressive symptomatology (p=0.07) before the patient course The husbands of the patients with the less attendances, reported more depressive symptomatology than the husbands of good attendees before the patient course (p<0.05) <p>Acceptability</p> <ul style="list-style-type: none"> One-half to two-thirds of the patients agreed that they had experienced improvements in their ability to manage daily activities and fatigue, and to practice healthy behaviors, as a result of the course 92% of the patients attending the ASHC-PS indicated that attending with their husband was beneficial 	<p>Results:</p> <ul style="list-style-type: none"> an educational intervention targeted at both the older arthritis patient and spousal caregiver is well attended and well received by both patient and caregiver. A couple approach may result in the patient's increased efficacy in managing arthritis which is supported by older literature The couple intervention was more successful in coping the emotional aspects of managing illness as a couple than the practical tropics Inclusion of the spouse may motivate patients of become more engage in psychosocial interventions <p>Limitations:</p> <ul style="list-style-type: none"> More differences between the interventions may have been observed with a larger sample size and greater statistical power. The high variability in subjects' scores on the outcomes may have limited our ability to detect differences between the two courses a number of the patients in this study had a second type of arthritis such as rheumatoid arthritis (RA). Physiological and psychosocial differences between OA and RA may result in couples' issues being qualitatively different

Table as a working instrument for a Critical Appraisal (AICA)

Reference: L.Martire , R. Schulz , F. Keefe , T. Starz , T. Osial Jr. , M. Dew & C. Reynolds III (2003) Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers, Aging & Mental Health, 7:1, 53-60

<ul style="list-style-type: none"> • Spousal support would increase. • The couple intervention would lead to less caregiving stress, increased caregiving mastery and a decrease in depressive symptoms. 	<p>for limiting the negative emotions of influencing the spouse) of managing arthritis as a couple</p> <p>Data analysis:</p> <ul style="list-style-type: none"> • Cronbach's alpha for all measures: 0.72 or greater <p>Pain measures:</p> <ul style="list-style-type: none"> • The five-item pain subscale from the Arthritis Impact Measurement Scales • Physical disability was assessed with 11 items from the Health Assessment Questionnaire, a measure designed for arthritis populations (assess difficulty with instrumental activities of daily living (IADLs; e.g. household tasks) and personal activities of daily living) • The 20-item Center for Epidemiology Studies–Depression scale was used to assess depressive symptomatology. • Two subscales from the Arthritis Self-Efficacy scale were used to assess perceived efficacy in managing pain and other arthritis symptoms • Satisfaction with spousal assistance received during the past month due to limitations from arthritis was assessed with regard to four IADLs and two ADLs • Emotional support received from the husband was assessed with nine items derived from measures used with other arthritis populations • The husband's insensitive responses to the patient's experiences with arthritis were assessed with seven items that were also derived from previous research <p>Spouse measures</p> <ul style="list-style-type: none"> • The stress of providing assistance to the patient with four IADLs and two ADLs during the past month was assessed • Caregiving mastery was assessed using a five-item measure developed for family caregivers • Husbands' depressive symptoms were assessed with the CES-D <p>Intervention evaluation</p> <p>Patients in the ASHC and ASHC-PS and husbands in the ASHC-PS indicated the extent to which they agreed with a series of statements about their experiences in the course</p> <p>Ethics: No information regarding ethics of any sort was mentioned.</p>	<ul style="list-style-type: none"> • Two-Thirds of the husband agreed that they were able to better help their wives <p><u>Differences between the two groups</u></p> <ul style="list-style-type: none"> • Patients in the ASHC reported significantly higher levels of pain than patients in the ASHC-PS ($p=0.05$) <p>Patient outcomes:</p> <ul style="list-style-type: none"> • There was a greater self-efficacy in managing arthritis in the couple intervention ($p=0.1$) <p>Spouse outcome</p> <p>Due to the low levels of caregiving stress at baseline, there was little potential for change in this outcome</p> <p>There was no significant pre-treatment differences between these two groups and the post-treatment findings did not differ from those presented for the full sample</p>	<p>for patients with both types of arthritis.</p> <p>Future research:</p> <ul style="list-style-type: none"> • Further studies should focus on patients who have only been diagnosed with OA. • A higher rate of symptomatology by the husbands may be observed with a sample of more disabled patients and spouses with more intensive caregiving responsibilities. <p>Conclusion:</p> <p>Couple oriented education leads to not only better attendance but also results in the patients feeling less pain and a better efficacy in managing arthritis pain</p> <p>Relevance for nurses:</p> <p>When spouses are involved in the care education of the patient, attendance rates will likely be higher.</p>
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Reference: L.Martire , R. Schulz , F. Keefe , T. Starz , T. Osial Jr. , M. Dew & C. Reynolds III (2003) Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers, Aging & Mental Health, 7:1, 53-60

Critical Appraisal of Study:

Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers

Introduction	Method	Results	Discussion
<p>Introduction to the topic:</p> <ul style="list-style-type: none"> The topic is thoroughly introduced with relevant information from previous studies. The introduction to the ASHC provides enough information to have a good understanding on how and why it was implemented in the study. <p>Significance of study:</p> <ul style="list-style-type: none"> The significance of the study is not clearly defined but can be read out of the introduction <p>Purpose of study:</p> <ul style="list-style-type: none"> The study's two-fold aim was clearly formulated and expounded upon. No research question was formulated <p>Author: Interdisciplinary team from the following institutions: Department of Psychiatry, University of Pittsburgh School of Medicine, and University Center for Social & Urban Research; Department of Psychiatry and Behavioral Sciences, Duke University School of Medicine; Division of Rheumatology, University of Pittsburgh Medical Center& Department of Psychiatry, University of Pittsburgh School of Medicine, USA</p> <p>Journal:</p> <ul style="list-style-type: none"> Aging & Mental Health Peer-reviewed monthly scientific journal 	<p>Design:</p> <ul style="list-style-type: none"> No explicit information was provided on the design type. Information relating to the design selection process is also missing. <p>Sample:</p> <ul style="list-style-type: none"> The in-depth selection process is described. Reasons why some couples chose to /could not participate were listed. Purpose sampling is done to maximize the homogeneity of a small sample. The participants were randomly allocated to a group <p>Data collection:</p> <ul style="list-style-type: none"> In this study, the patient's spouse or other family members or friends were not allowed to attend the ASHC in order to provide an appropriate comparison intervention for the couple education All data is received from the participants that did not drop out The methods for data collection was the same for the participants in each group <p>The measuring instruments used were proven by past literature and is clearly defined. The reason for choice for each measuring instrument is not clearly defined</p> <p>Data analysis: The data analysis is clearly defined and statistic. A conclusion can be derived from the statistical results</p> <p>Ethics:</p> <ul style="list-style-type: none"> There is no mention of ethical questions 	<ul style="list-style-type: none"> The results are purely quantitative. Although the participants were thoroughly interviewed before and after the interventions, the interviews had no bearing whatsoever on the results. The results are attractively displayed through the use of tables and are supported with clear calculations. Since the results expanded over many various topics, this shows that the authors were cognizant of the multi-factorial influences which can affect the results of such a study 	<p>Results: Not all results are discussed. The interpretations a line with the results and are supported by existing literature. Alternative explanations mentioned.</p> <p>Limitations are critically discussed</p> <p>Relevance for nurses: Despite no mention of nurses in this study, the study's results can be quite useful for nurses because they often perform patient education. When equipped with the knowledge that incorporating the spouse into the education process aids both members of the partnership, nurses can provide and advocate for more couple-oriented education.</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

Reference: L.Martire , R. Schulz , F. Keefe , T. Starz , T. Osial Jr. , M. Dew & C. Reynolds III (2003) Feasibility of a dyadic intervention for management of osteoarthritis: A pilot study with older patients and their spousal caregivers, Aging & Mental Health, 7:1, 53-60

General assessment according to Bartholomeyczik (2008)

*The **objectivity** is shown through the following aspects:* The source of the finances is mentioned (grants from the University of Pittsburgh); each test situation is standardized (All the patients complete the Arthritis Self-Help Course (ASHC), in the intervention group the ASHC was expanded to include the partners); the method to evaluate the results was defined before the intervention and was standardized by literature supported Scales; to avoid bias, the interventionists were trained to perform the interventions.

*The **reliability** is shown through the following aspects:* to prove the reliability of the measuring instruments, the Cronbach Alpha for an independent sample was defined before the intervention; the materials (ASHC) used to evaluate the research question has been tested and has shown to successfully reduce patients pain severity and depressive symptomatology and enhance a sense of self-efficacy in managing arthritis pain and other symptoms; the evaluation instruments are clearly defined and replicable.

*The **validity** is shown through the following aspects:* the method used to answer the research questions is understandable and verifiable; the participants were randomly allocated to the intervention or control group; both groups were treated equally.

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Sylvain, H., & Talbot, L. R. (2002). Synergy towards health: a nursing intervention model for women living with fibromyalgia, and their spouses. Journal of Advanced Nursing, 38(3), 264–273

Summary of the Study:

Synergy towards health: a nursing intervention model for women living with fibromyalgia, and their spouses

Introduction	Method	Results	Discussion
<p>Background</p> <ul style="list-style-type: none"> Fibromyalgia is a chronic rheumatoid condition that changes the quality of life of the those affected, including the partners of the patients Fibromyalgia main symptoms are diffuse pain, fatigue and sleep disturbances No tests are found that can diagnose fibromyalgia accurately and there is no cure Currently its treated with medication, exercise and education <p>Significance of study</p> <ul style="list-style-type: none"> Till this point the evaluations of interventions did not take in to consideration the families, but only focused on the patients with in a limited context (pain clinic). Patients are dissatisfied with their medical consultations as they feel misunderstood, not believed, and have no support <p>Purpose of study:</p> <ul style="list-style-type: none"> to develop an agreed upon nursing intervention model for women living with fibromyalgia, their spouses and nurses working in a community health center <p>Research question:</p> <ul style="list-style-type: none"> According to the perspectives of women affected with fibromyalgia, their spouses and nurses, what is the meaning of a helpful intervention for women affected with fibromyalgia and their spouses? What nursing intervention model can be derived from the consensus of these three perspectives? 	<p>Design:</p> <p>A qualitative inductive approach based on the principles of the fourth-generation evaluation, carried out within the principles of constructivist paradigm</p> <p>Setting: community health center in Quebec, Canada.</p> <p>Sample: Three distinct groups (purposive sampling within the research setting, the Fibromyalgia Regional Association and snowball sampling-referrals from earlier participants)</p> <ul style="list-style-type: none"> Women (n=7) diagnosed with fibromyalgia their spouses (n=4) (average age 53, range 47-65, couples participating married average 28 years, range 21-43 years), community health nurses(n=4) who intervene with this clientele <p>Other professionals (physician (n=2), physiotherapist (n=1), community organizer (n=1), and nurse manager (n=1)) were involved in the research.</p> <p>Data collection</p> <ul style="list-style-type: none"> 14-month collection period (mainly in 1999) <p>Three cycles for data collection occurred within the scope of this research:</p> <ul style="list-style-type: none"> individual interviews (n=20) lasted 60 minutes, recorded on audiocassettes, order of interview: woman, spouse and then nurses and other health professionals group interviews (n=3), were videotaped, took place after individual interviews of the same group, allowing respondents to comment on the emerging construction, confirming its likelihood or noting elements of disagreements validation interviews (n=31), conducted over the telephone with each participant a few weeks after the individual and group interviews. <p>Data analysis</p> <ul style="list-style-type: none"> overall analysis of the written synthesis a thematic analysis of the common meanings Repeating the cross-sectional analysis, at first in a same interview, then in the same group and finally between groups, main themes and categories for the intervention model were found, which enabled the construction of a coding scheme The NUD.IST software was used to help data coding and analysis work <p>Ethics</p> <ul style="list-style-type: none"> The project was approved by the University de Montréal Multi-Faculty Health Sciences Ethics Committee Written consent was obtained from all participants following an explanation of the research, its purpose and the participants' rights relating to the project. 	<p>First research question-Experience</p> <p>Woman:</p> <ul style="list-style-type: none"> helpful intervention is one that consists in believing, supporting and ensuring follow-up care. Professional intervention extremely important at time of diagnosis, which is now lacking Highlighted the importance of physicians' role and the lack of recognition for the nurse's role Physicians struggle to believe and don't listen properly Professional intervention as a means of guiding one towards self-help and helping personal development Personal Development extremely important, which includes a reflective process <p>Spouses</p> <ul style="list-style-type: none"> their supporting role revolves around the feelings of love that the couple has for one another two types of support: practical, and psychological support need guidance to better prepare them in providing the psychological support needed felt neglected and left to deal with the problem on their own, especially by health professionals. <p>Nurses</p> <ul style="list-style-type: none"> Two major themes: support and education Teaching enables the affected women to gain some control and reinforces the individual's potential <p>Health professionals</p> <ul style="list-style-type: none"> Believing the person and encourage the benefits of exercise (1) intervention at an earlier stage; (2) increased consultation between the various disciplines, services and organizations; and (3) better training of health professionals about fibromyalgia <p>Second research question-Intervention model</p> <p>The nature of the intervention</p> <ul style="list-style-type: none"> Believing Supporting (being heard and receiving household help) Teaching <p>The context of the intervention</p> <ul style="list-style-type: none"> Timing of the professional intervention (the sooner the better) Health care and social services context (lack of existing services) 	<p>Patients want to be supported and guided towards self-management</p> <p>The Bronfenbrenner's Ecological Systems theory, an ecosystem framework, is suggested to help to articulate and discuss the various levels of contexts that affect intervention.</p> <p>Future research</p> <p>Action must be taken to address the shortcomings in the health care system. Integrated service networks are gaining importance in the context of the reorganization of health services in Canada</p> <p>Limitations</p> <ul style="list-style-type: none"> Part of the study sample included couples or people living together, which can be regarded as an asset, but also as a drawback. Spousal support can sometimes be harmful, but by choosing to meet couples, there was an access to people who had some level of support to deal with their health problem single people have different histories and probably view the concept of what is a helpful intervention in a different way. <p>Conclusion</p> <p>The intervention model does not represent the solution to the problems experienced by all the people living with fibromyalgia on a day-to-day basis, but there is a certain potential for transfer</p> <p>Relevance for nurses</p> <p>Nurses are well placed to meet the needs of women with fibromyalgia. It is important to support the establishment of community health care nursing projects that are based on disciplinary research results, thus allowing for increased recognition of the nurses' contribution within this context.</p>

Table as a working instrument for a Critical Appraisal (AICA)

Reference: Sylvain, H., & Talbot, L. R. (2002). Synergy towards health: a nursing intervention model for women living with fibromyalgia, and their spouses. Journal of Advanced Nursing, 38(3), 264–273

Critical Appraisal of Study:

Synergy towards health: a nursing intervention model for women living with fibromyalgia, and their spouses

Introduction	Method	Results	Discussion
<p>Introduction to the topic The prevalence of fibromyalgia is not mentioned. Broad impact of Fibromyalgia on the patient is mentioned.</p> <p>Significance of study Meta-analysis studies are used to show that there is a gap in literature on this topic</p> <p>The purpose of the study: The aim of this study is clearly defined which includes two research questions.</p> <p>Author The first author H. Sylvain is a professor Nursing at the University du Quebec a Rimouski, Québec, Canada The research funding is not mentioned.</p> <p>Journal Publication: in the Journal of Advanced Nursing (Peer-reviewed Journal)</p>	<p>Design The chosen design enables one to take into consideration the perspectives and expertise of those who live with fibromyalgia daily</p> <p>Sample: The size of the sample is comprehensible, but for the size of the whole population not representable. The participants are suited for the collection of information and experience the researched phenomena. Involving other professions (besides nursing) makes it more meaningful. Purposive Sampling within the research setting, the Fibromyalgia Association was chosen to only include participants in contact with this phenomenon.</p> <p>Data collection The time period for the collection of the data is adequate. The time taken for the individual interviews is sufficient to receive enough information. No mention of the time period is made for the other interviews. The validation interviews ensured that the synthesis sent out reflected that of the meeting, that the themes were within the realms of credibility and that the emerging intervention model was representing the shared construction Credibility was ensured in that member checking occurred throughout the research process through group interviews. Transferability is shown in the way that the research results are organized and transparent.</p> <p>Methodological reflection: The method concurs with the research approach. Personal bias is not mentioned.</p> <p>Data analysis The data analysis in fourth generation evaluation is grounded in the principle of the hermeneutic and dialectic circle, which serves to use multiple approaches with the data. The two forms of interpretation that were used enabled a dialectical movement between the whole and its constituent parts. The process of data analysis mentioned. Dependability and reflectivity are provided by the methodological notes, theoretical notes, and personal notes collected daily in a journal. This provides an account of the research process. To ensure trustworthiness the emerging model was presented to participants for validation and refinement repeatedly during data collection and the data analysis cycles</p> <p>Ethics The relevant ethical questions are clarified. It is unclear the relationship between the researchers and the participants.</p>	<p>The results reflect the comprehensiveness of the data and are significant. A brief description of each group's results is presented. There are very few citations and no diagrams to support the written words.</p> <p>The intervention model represents the shared construction of the all the participants derived from the hermeneutic circle</p>	<p>Results: The current study results are compared with existing literature and shows that this study gives various new insights, among others into how important it is that health professions support patients and their families.</p> <p>Relevance for nurses The results are relevant and useful in nursing, even though these range of unmet needs highlight a challenge facing healthcare professionals. Suggestions for in the future are made.</p> <p>Limitations of the study are openly discussed Suggestions for future research are made</p> <p>Purpose of the study With the help of the results, the purpose of the study is achieved</p>

Quality/ Body of evidence:

The study is at the lowest level of the 6S pyramid because it is an original article

General assessment according to Lincoln and Guba (1985)

*The **credibility** is shown through the following aspects:* the article was published in the *Journal of Advanced Nursing*, a peer reviewed, scientific journal; The first author H. Sylvain is a professor of Nursing at the Universite du Quebec a Rimouski, Quebec, Canada. *A component which detracts from this study's **credibility** is:* The research funding is not mentioned.

*The **transferability** is shown through the following aspects:* the research took place in Canada, a western country which is comparable to Switzerland in terms of values, healthcare, and the economy; inclusion criteria were named; the content, length, and setting of the interviews are described; there is an in-depth description of the analysis process; the categorization of the participant's statements was clearly conducted; the chosen statements in the results were coherent and convincing.

*The **dependability** is shown through the following aspects:* ethical approval was obtained from the Université de Montreal Multi-Faculty Health Sciences Ethics Committee; written consent was obtained from all participants following an explanation of the research, its purpose and the participants' rights relating to the project; numerous international studies are used to build the theoretical background; and the process of study participant recruitment is clearly described.

*The **confirmability** is shown through the following aspects:* The individual interviews were recorded on audiocassettes, the group interviews were videotaped, and the validation interviews took place on the phone. Interviews were transcribed and synthesis created. *Two components which detract from this study's **confirmability** are:* The interview transcripts are only indirectly referenced, and it is unknown whether the interviews were transcribed loosely or verbatim.